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JANUARY 2, 1909

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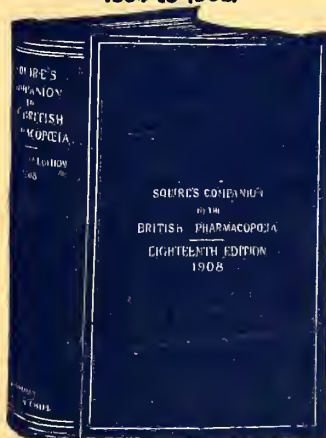
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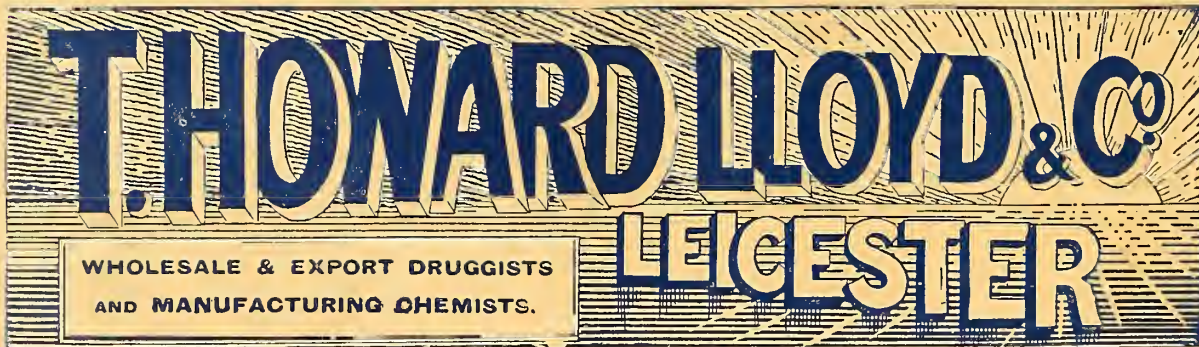
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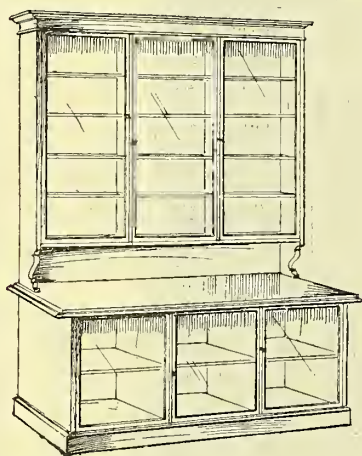
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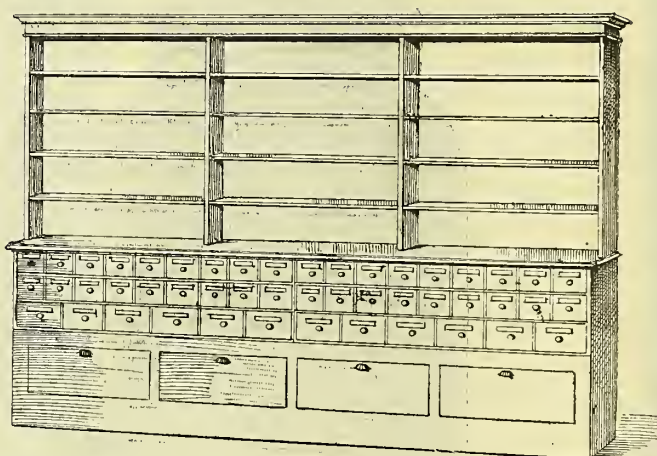
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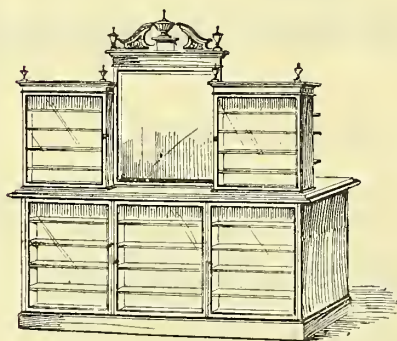
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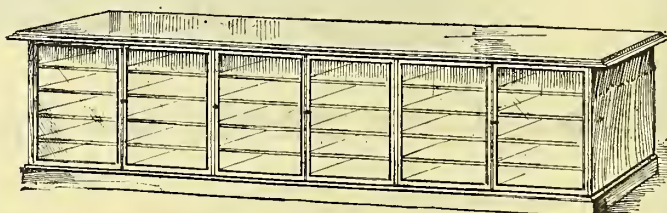
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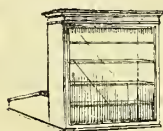
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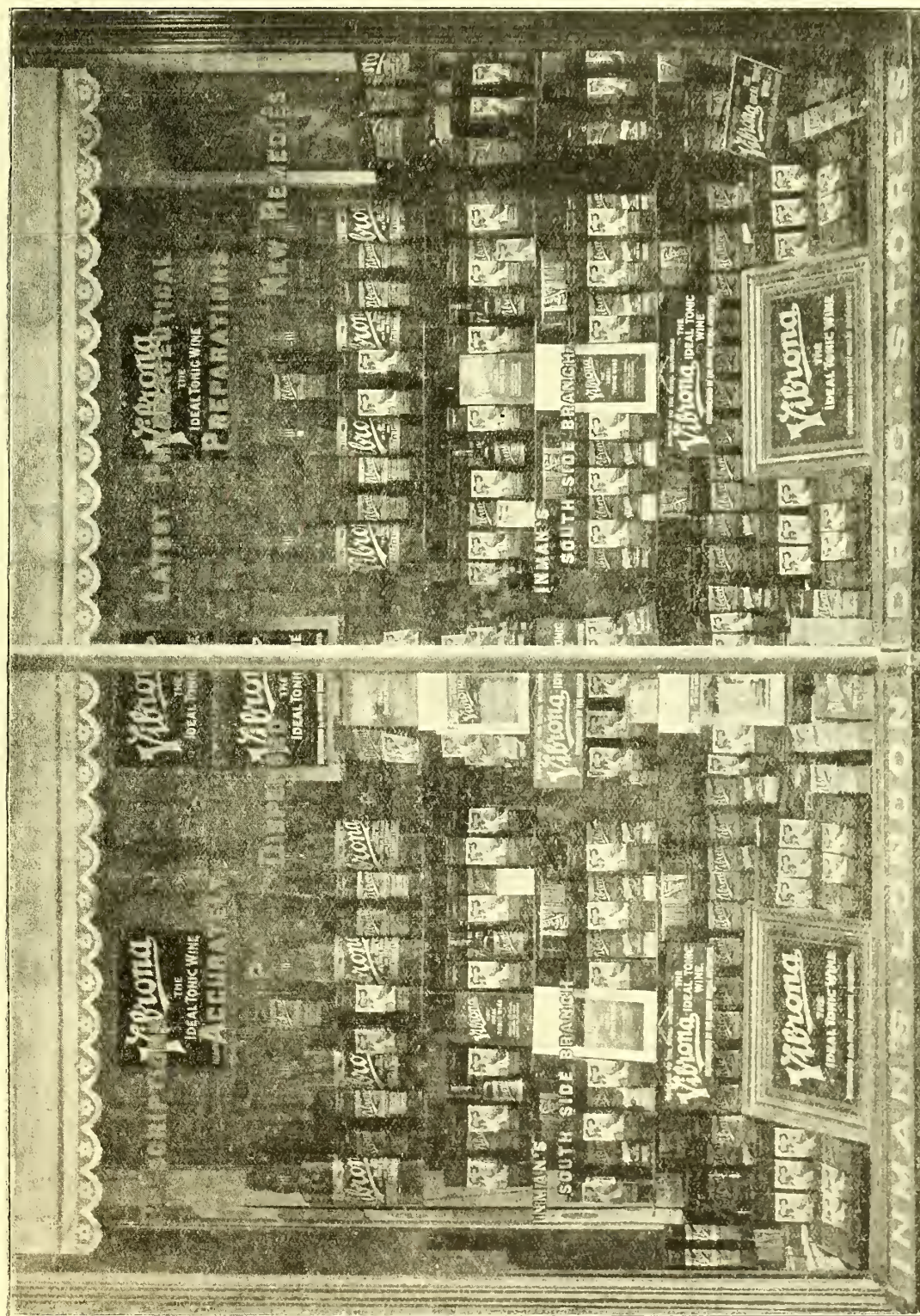
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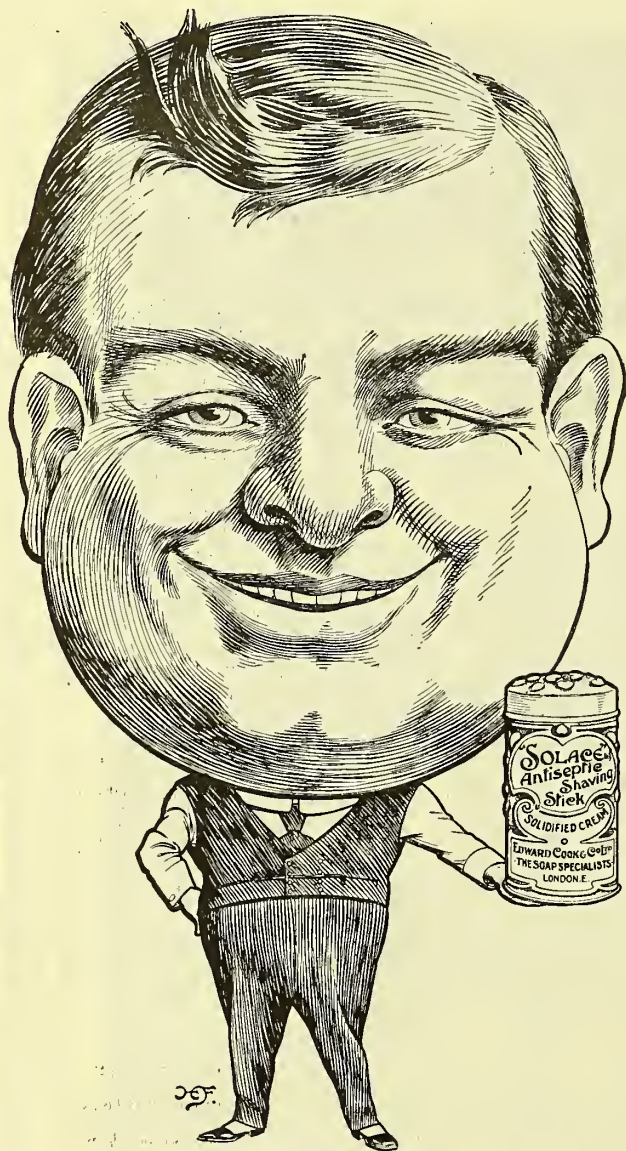
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Zeal, G. H.**COD-LIVER OIL**Albrethson, A., & Co.
Allen & Hanburys, Ltd.
Alliance Drug & Chem. Co.
Baiss Bros. & Stevenson, Ltd.
Barron, Harveys & Co.
Davy Hill & Hodgkinsons, Ltd.
Devold, Peder
Evans Sons Lescher & Webb, Ltd.
Hearon, Squire & Francis, Ltd.
Lloyd, T. Howard, & Co.
Southall Bros. & Barclay, Ltd.
Wright, Layman & Umney, Ltd.
Zimmermann, C., & Co.**COCOA**Cadbury Bros., Ltd.
Frame Food Co.
International Plasmon, Ltd.
Oppenheimer, Son & Co., Ltd.**COLOURS, BEVERAGE, ETC.**Cresp-Martineng
Stevenson & Howell, Ltd.
(See also DAIRY ADJUNCTS)**COMBS**Hovenden, R., & Sons, Ltd.
Kent, G. B., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co.
Newbery, F., & Sons, Ltd.**CORKS**

Mitchell, N. W., & Sons, Ltd.

CORRUGATED PAPER

Ebnrite Paper Co., Ltd.

COUNTER ADJUNCTS

Evans Sons Lescher & Webb, Ltd.

COUNTER SPECIALITIESAllen & Hanburys, Ltd.
Davy Hill & Hodgkinsons, Ltd.
Hewlett, O. J., & Son
Newbery, F., & Sons, Ltd.
Southall Bros. & Barclay, Ltd.
Woolleys, Ltd.**CREAM OF TARTAR**

Davy Hill & Hodgkinsons, Ltd.

CREOSOTEBaiss Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood
Morson, T., & Son**CYANIDES**

May & Baker, Ltd.

DAIRY ADJUNCTSBenger's Food, Ltd.
Fullwood, R. J., & Bland
Tomlinson & Hayward, Ltd.**DEAFNESS AIDS**

Hawksley, T.

DENTAL MATERIALS

Edwards, W., & Co., Ltd.

DENTAL MECHANICSFentiman, A. G.
Fentiman, A. J., & Co.
Halder, E. C.
Mann, F.
Wardale & Co.**DENTIFRICES**Anglo-American Dentifrice Co.
Beecham, T.
Beiersdorf, P., & Co.
Bell, John, & Co.
Blackie, R.
Burrongs Wellcome & Co.
Calvert, F. C., & Co.
Christy, T., & Co.
Cook, E., & Co., Ltd.
Eueryl, Ltd.
Jewsbury & Brown
Lambert Pharmacal Co.
Lescot Perfumery Co.
McKesson & Robbins
Maw, S., Son & Sons
Meyer-Sander Dental Supply Co.
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Parke, Davis & Co.
Sangers
Sanitas Co., Ltd.
Sordont (Richard)
Standard Tablet & Pill Co.
Woods, W., & Son**DIABETIC BREAD AND FOOD**

Callard & Co.

DISINFECTANTSBaiss Bros. & Stevenson, Ltd.
Burgoyne, Burdidges & Co.
Burt, Boulton & Haywood, Ltd.
Calvert, F. C., & Co.
Condy & Mitchell, Ltd.
Dalmas, A. de St., & Co.
Edwards, W., & Son
Jeyes' Sanitary Compounds, Ltd.
Kay Bros., Ltd.
Lambert Pharmacal Co.
Sanitas Co., Ltd.
Tomlinson & Hayward, Ltd.
Tugwood & Wilton
Willows, Francis B. & T.
Wright, Layman & Umney, Ltd.
Zimmermann, C., & Co.**DIGESTIVE PRODUCTS**Armour & Co., Ltd.
Benger's Food, Ltd.
Fairchild Bros. & Foster
Parke, Davis & Co.
Squire & Sons
Zimmermann, C., & Co.**DRUGS, CRUDE**Carling, G. Wyman, & Co.
Potter & Clarke, Ltd.
Ransom, W., & Son**DOG BISCUITS AND PREPS.**

Spratt's Patent, Ltd.

DYES

Whitaker & Co.

DRUGGISTS' SUNDRIESAyrton, Saunders & Co., Ltd.
Barclay & Sons, Ltd.
Berliner, Arthur
Burge, Warren & Ridgley
Burgoyne, Burdidges & Co.
Chemists' Co-operative Wholesale
Christy, T., & Co.
Clark's Pyramid and Fairy Light Co., Ltd.
Cook, Alfred, & Co.
Curling, G. Wyman, & Co.
Edwards, W., & Son
Evans Sons Lescher & Webb
Fecher, M. J.
Hewlett, O. J., & Sons
Hovenden, R., & Sons, Ltd.
Improved Mailing-case Co.
Ingram, J. G., & Son
Johnsen & Jorgensen, Ltd.
Lennon, Ltd.
Maw, S., Son & Sons
May, Roberts & Co.
Murdock, John, & Co.
Newbery, F., & Sons, Ltd.
Pothe, H., & Co.
Quelch, H. C., & Co.
Reuter, R. J.
Sangers
Schutze, F., & Co.
Solport Bros.
Southall Bros. & Barclay, Ltd.
Tidman & Son, Ltd.
Toogood, W., Ltd.
Viscose Co., Ltd.
Wood, Vincent
Woolley, J., Sons & Co.**EAU DE COLOGNE**Farina, J. M.
Farina, J. M. (No. 4)
McCracken, J. & R.
Reuter, R. J.
Schutze, F., & Co.
Van Oppen, Ross & Co.**EDUCATIONAL INSTITUTIONS**Bath and West of England College of Pharmacy
Birmingham and Midland College of Pharmacy
City of London College
Glasgow School of Pharmacy
Highbury New Park College
Leeds College of Pharmacy
Liverpool School of Pharmacy
London College of Pharmacy
Manchester College of Pharmacy
Muter's (So. Lond.) School of Pharmacy
North of England School of Pharmacy
Northern College of Pharmacy
Palman School of Memory
Royal Dispensary
School of Pharmacy
South of England College of Pharmacy
Westminster College of Pharmacy**EMERY AND CLOTH**

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EMULSIONS, COD - LIVER OIL, ETC.Allen & Hanburys, Ltd.
Baiss Bros. & Stevenson, Ltd.
Barron, Harveys & Co.
Blackie, R.
Boulton, J., & Co.
Burgoyne, Burdidges & Co.
Davy Hill & Hodgkinsons
Evans Sons Lescher & Webb, Ltd.
Faulding, F. H., & Co.
Harker, Stagg & Morgan, Ltd.
Hearon, Squire & Francis, Ltd.
Lorimer & Co., Ltd.
Oldfield, Pattinson & Co.
Parke, Davis & Co.
Woolleys, Ltd.

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Allen & Hanburys, Ltd.
Bishop, Alfred, Ltd.
Blackie, R.
Bristol-Myers Co.
Cox, A. H., & Co., Ltd.
Davy Hill & Hodgkinsons
Evans Sons Lescher & Webb
Goodall, Backhouse & Co.
Kntnow, S., & Co., Ltd.
Lloyd, T. Howard, & Co.
Lorimer & Co., Ltd.
Martindale, W.
Newhall & Mason.
Parke, Davis & Co.
Potter & Clarke
Shirley Bros.
Standard Tablet & Pill Co.
Sturge, John & E.
Tidman & Son, Ltd.
Tyrer, T., & Co., Ltd.
Wand Mfg. Co.
Wright, Layman & Umney

ELASTIC HOSIERY

Ayrton, Saunders & Co., Ltd.
Berliner, Arthur
Haywood, J. H.
Maw, S., Son & Sons
Wood, Vincent

ENEMAS

Bailey, W. H., & Son
Baird Bros.
Burge, Warren & Ridgley
Daval Rubber Co.
Ingram, J. G., & Son
Maw, S., Son & Sons
Toogood, W., Ltd.
Warne, W., & Co., Ltd.

EPSOM SALTS

Howards & Sons, Ltd.

ESSENCES, CONCRETE

Lautier Fils
Murray, O., & Co., Ltd.
Roure-Bertrand fils

ESSENCES, SOL. AND FRUIT

Alliance Drug & Chem. Co.
Baiss Bros. & Stevenson, Ltd.
Barnett & Foster
Bnsb, W. J., & Co., Ltd.
Cresp-Martineng
Evans Sons Lescher & Webb
Hay, Wm., Ltd.
London Essence Co.
Lorimer & Co., Ltd.
Newhall & Mason
Roure-Bertrand fils
Spencer, J., Son & Co.
Stevenson & Howell, Ltd.
Whittaker, A.

ETHERS

Baiss Bros. & Stevenson, Ltd.
Howards & Sons, Ltd.
Maofarian, J. F., & Co.
May & Baker, Ltd.
Morson, T., & Son
Smith, B. A., & Co.
Tyrer, T., & Co., Ltd.
White, A., & Sons

ETHYL CHLORIDE

Duncan, Flockhart & Co.

EUCALYPTUS OIL

Alliance Drug & Chem. Co.
Baiss Bros. & Stevenson, Ltd.

EXTRACT OF HERBS

Newhall & Mason
Potter & Clarke

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Allen, Stafford, & Sons, Ltd.
Chemists' Co-operative Wholesale
Hewlett, C. J., & Son
Pharmaceutische Handelsv.
Ransom, W., & Son
(See also WHOLESALE DRUGGISTS)

FEEDING BOTTLES

Brefft, E., & Co., Ltd.
Fecher, M. J.
Hovenden, R., & Sons, Ltd.
Kilner Bros., Ltd.
Maw, S., Son & Sons
Reuter, R. J.
Sangers'

FILLING MACHINES

Roberts' Pat. Fill. Machine Co.

FILTERS (WATER)

Berkefeld Filter Co., Ltd.

FLY CATCHERS

Smith, J. H., & Co.

FORMALDEHYDE

Audesol Works
Burt, Boulton & Haywood
Tugwood & Wilton

FOODS, INFANTS'

Allen & Hanburys, Ltd.
Benger's Food, Ltd.
Davy Hill & Hodgkinsons
Frame Food Co., Ltd.
Lofthouse & Saltmer
Natural Food Co., Ltd.
Willows, Francis B. & T.

FOODS, SPECIAL

Allen & Hanburys, Ltd.
Benger's Food, Ltd.
Brand & Co., Ltd.
Callard & Co.
Fairchild Bros. & Foster
Frame Food Co., Ltd.
International Plasmon, Ltd.
Lemoo, Ltd.
Menley & James, Ltd.
Wander, A.

FULLER'S EARTH

Mumford, G. S., & Sons

FUMIGATORS

Sanitas Co., Ltd.

GELATIN AND GLUE

Boehm, F., Ltd.

GLAUBER'S SALT

Bramwell, E., & Son
Howards & Sons, Ltd.
Nichols Chemical Co., Ltd.

GLYCERIN

Alliance Drug & Chem. Co.
Boehm, F., Ltd.
Price's Patent Candle Co.

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Allen, Stafford, & Sons, Ltd.
Goodall, Backhouse & Co.
Willows, Francis B. & T.

GUMS

Fink, F., & Co.

HAIR PREPARATIONS

Capsuloid Co., Ltd.
Daisy, Ltd.
Edwards' "Harlene" Co.
Harker, Stagg & Morgan
J. S. W. Preparations, Ltd.
"Nyto"

Robare's Aureoline
Rowland, A., & Sons
Woolleys, Ltd.

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Christy, T., & Co.

HAT DYES

Whittaker & Co.

HERBS

Potter & Clarke

HOMOEOPATHIC MEDICINES

Ashton & Parsons, Ltd.
Epps, J., & Co., Ltd.
Keene & Ashwell, Ltd.
Leath & Ross

HOT-WATER BOTTLES

Berliner, Arthur
Burge, Warren & Ridgley
Dunlop Rubber Co., Ltd.
Fulham Pottery & Cheavin
Filter Co., Ltd.
Maw, S., Son & Sons
Southall Bros. & Barclay
Wood, Vincent

HOTELS

Esmond Hotel
Kingsley Hotel
Thaokeray Hotel

HYDROGEN PEROXIDE

May & Baker, Ltd.

Sanitas Co., Ltd.

Tyrer, T., & Co., Ltd.

HYPHOPHOSPHITES

May & Baker, Ltd.

Merok, E.

Tyrer, T., & Co., Ltd.

INHALERS

Christy, T., & Co.

Fecher, M. J.

Sanitas Co., Ltd.

INK

Bewley & Draper, Ltd.

Hickisson, A. B.

INSECT POWDER

Boehm, F., Ltd.

Shirley Bros., Ltd.

Smith, B. A., & Co.

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Corry & Co., Ltd.

Francis, Son & Naylor

Smith, B. A., & Co.

Tomlinson & Hayward, Ltd.

Woolleys, Ltd.

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Atkinson, G., & Co.

Howards & Sons, Ltd.

Merck, E.

Morson, T., & Son

Whiffen, Thos.

Wink, J. A., & Co.

ITROSYL

Fletcher, Fletcher & Co.

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Cook, A., & Co.
Johnsen & Jorgensen, Ltd.
Kilner Bros., Ltd.
Maw, S., Son & Sons
Pothe, H., & Co.
Reuter, R. J.
Stipendium Stopper Co.
Toogood, W., Ltd.

LACTOBACIL. EDUCTS

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LANOLINE

Burroughs Wellcome & Co.
Christy, T., & Co.
Sanger,

LANTERNS

Butcher, W., & Sons

LARD

Chemists' Co-operative Wholesale

Ewen, J., & Sons

LEATHERS

Solport Bros.

LIME JUICE AND CORDIAL

Evans Sons Lescher & Webb
Goodall, Backhouse & Co.
Jdris & Co., Ltd.

LINSEED, CRUSHED, ETC.

Allen, Stafford, & Sons
Alliance Drug & Chem. Co.
Mumford, G. S., & Sons

LIQUORICE JUICE

Alliance Drug & Chem. Co.
Barron, Harveys & Co.
Boehm, F., Ltd.

Burgoyne, Burbidges & Co.

Hearon, Squire & Francis

Jackson, E. E.

Mumford, G. S., & Sons

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Allen, Stafford, & Sons, Ltd.
Fletcher, Fletcher & Co.

Hewlett, C. J., & Son

Robinson, B., & Co.

LITHIA SALTS

Davy Hill & Hodgkinsons
May & Baker, Ltd.

Merck, E.

LOOFANS

Cresswell Bros. & Schmits

LOZENGES

Allen & Hanburys, Ltd.
Cox, A. H., & Co., Ltd.
Denoual, J., & Co.

Jackson, E. E.

Potter & Clarke

Raines & Co.

Shirley Bros., Ltd.

Warrick Bros.

MACHINERY, PHARMACAL

Allen & Hanburys, Ltd.
Bennett, Sons & Shears, Ltd.
Brown & Son

Fecher, M. J.

Gardner, Wm., & Sons, Ltd.

"Heroules" Meat Juice Press

Pindar, J. W., & Co.

Roberts' Patent Filling Machine

Co.

Smith, B. A., & Co.

Stokes, F. J., Machine Co.

Thompson & Capper (Stokes)

Wilkinson, S. W., & Co.

MAGNESIA AND ITS SALTS

Henry, T. & W.

Howards & Sons, Ltd.

May & Baker, Ltd.

Washington Chemical Co.

MALT EXTRACT AND PREPS

Allen & Hanburys, Ltd.

Blackie, R.

Burroughs Wellcome & Co.

Davy Hill & Hodgkinsons

Evans Sons Lescher & Webb

Hearon, Squire & Francis

Hewlett, C. J., & Son

Lorimer & Co., Ltd.

Oppenheimer, Son & Co., Ltd.

Paine & Co., Ltd.

Raines, Clark & Co., Ltd.

Southall Bros. & Barclay, Ltd.

Squire & Sons

Wright, Layman & Umney

MARKING INK

Hickisson, A. (Bond's)

MEASURES

Taylor, F. H., & Sons

MEAT EXTRACT

Armour & Co., Ltd.

Brand & Co., Ltd.

MENTHOL CONES

Maw, S., Son & Sons

Shirley Bros., Ltd.

MEDICINE CHESTS

Burroughs Wellcome & Co.
Keene & Ashwell, Ltd.
Leath & Ross
Lloyd, T. Howard, & Co.
Parke, Davis & Co.

MERCURIALS

Atkinson, G., & Co.
Howards & Sons, Ltd.
May & Baker, Ltd.
Merck, E.
Tyrer, T., & Co., Ltd.
Whiffen, Thos.

Wink, J. A., & Co.

METHYLATED SPIRITS

Burroughs, J., Ltd.
Preston's Liverpool Distillery

Randall & Son, Ltd.

MILK APPARATUS

Hawksley, T.

Zimmermann, O., & Co.

MILK SUGAR

Hollandsche M. S. Fabrick

Zimmermann, C., & Co.

MINERAL WATERS & SALTS

Apollinaris Co., Ltd.
Burrow, W. & J. (Malvern)

Davy Hill & Hodgkinsons, Ltd.

Findlater & Co.

Hughes, E. Griffiths

Ingram & Royle, Ltd.

Parke, Davis & Co.

Vitaregis Hygienic Co.

NAPHTHAS

Burt, Boulton & Haywood

NEBULIZERS

(See SPRAYS)

OILS, ESSENTIAL

Allen, Stafford, & Sons, Ltd.
Alliance Drug & Chem. Co.

Atkinson, G., & Co.

Baiss Bros. & Stevenson

Bush, W. J., & Co., Ltd.

Chiriac, Antoine

Cresp-Martineng

Evans Sons Lescher & Webb

Goodall, Backhouse & Co.

Jakson, J., & Co.

Lautier Fils

Lescol Perfumery Co.

London Essence Co.

Ransom, W., & Son

Roure-Bertrand fils

Seymour, Joseph

Spencer, J., Son & Co.

Spurway et Cie.

Stevenson & Howell, Ltd.

Todd, A. M., Co.

Whiffen, Thos.

Whittaker, A.

Wink, J. A., & Co.

Wright, Layman & Umney

OILS, FATTY, ETC.

Allen, Stafford & Sons, Ltd.

Atkinson, G., & Co.

Cresp-Martineng

Lautier Fils

Price's Patent Candle Co.

Smith, B. A., & Co.

OILS, MINERAL

Price's Patent Candle Co.

Wright, Layman & Umney

ointments

Blackie, R.

Chemists' Co-operative Wholesale

Curling, G. Wyman, & Co.

Duncan, Flockhart & Co.

Kno-ska Co.

Oldfield, Pattinson & Co.

PACKED GOODS
(See WHOLESALE)**PALATINOLIDS**
Oppenheimer, Sons & Co.**PATENT AGENT**
Barker, R. W.**PERFUME MATERIALS**Bell, John & Co.
Buisson Frères, see Bush
Bush, W. J., & Co., Ltd.
Chiris, Antoine
Compagnie Morana
Cresp-Martineng
Halifor Co.
Hall, B. P., & Co.
Lautier Fils
Murray, O., & Co., Ltd.
Potter & Moore, see Bush
Shipkoff & Co.
Spencer, J., Son & Co.
Spruway et Cie.
Treant, R. O., & Co.
Zimmermann, O., & Co.**PERFUMES**Allen & Hanbury, Ltd.
Barolay & Sons, Ltd.
Barron, Harveys & Co.
Bronnley, H., & Co., Ltd.
Bush, W. J., & Co., Ltd.
Charles, W. F.
Christy, T., & Co.
Cresp-Martineng
Erasmo Co., Ltd.
Evans Sons Lescher & Wehb, Ltd
Halifor Co.
Hall, B. P., & Co.
Hearon, Squire & Francis
Hertz & Co.
Hewlett, C. J., & Son
Hovenden, R., & Sons, Ltd.
Lescol Perfumery Co.
London Essence Co.
McCraeken, J. & R.
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Queloh, H. C., & Co.
Reuter, R. J.
Shirley Bros.
Southall Bros. & Barolay
Spencer, J., Son & Co.
Spruway et Cie.
To-Kalon Mfg. Co.
Warrick Bros.
West, T.**PESSARIES**Burge, Warren & Ridgley
Rendell, W. J. (Quin.)**PETROLEUM JELLY**

Chesebrough Mfg. Co.

PHOTO. CHEMICALSBoehring, C. F., & Soehne
Burroughs Wellcome & Co.
Lockyer, J. E.
Merok, E.
Tyrer, T., & Co., Ltd.**PHOTO. GOODS**Barolay & Sons, Ltd.
Butcher, W., & Son, Ltd.
Darton, F., & Co.
Evans Sons Lescher & Wehb
Ilford Ltd.
Lennon, Ltd.
May, Roberts & Co.
Murdoch, John, & Co.
Newbery, F., & Sons, Ltd.**PHOTO. WORK**

Express Developing Co.

PILL MAKERSAllen & Hanbury, Ltd.
Ascho, O. F., & Co.
Barron, Harveys & Co.
Bishop, Alfred, Ltd.
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Davy Hill & Hodgkinsons
Evans Sons Lescher & Wehb, Ltd
Hearon, Squire & Francis
Hewlett, C. J., & Son
Lloyd, T. Howard, & Co.
McKesson & Robbins
Newbery, F., & Sons
Parke, Davis & Co.
Pill, Tablet, & Capsule Alliance
Southall Bros. & Barolay
Standard Tablet & Pill Co.
Wand Mfg. Co.
Warner, W. R., & Co.
Woolley, J., Son & Co., Ltd.
Wright, Layman & Umney**PILSTERS**Alcock Mfg. Co.
Berliner, Arthur
Beiersdorf, P., & Co.
Dalmas, A. de St., & Co.
Leslies, Ltd.
Maw, S., Son & Sons
Solport Bros.**POLISHES (VARIOUS)**Bradley & Bourdas
Kay Bros., Ltd.
Oakley, J., & Son, Ltd.**PRINTERS**Ford, Shapland & Co.
Harrison & Waide
Smith, W. H., & Son
Townsend, J., & Sons**PROPRIETARY ARTICLES**Anglo-American Drug Co.
Anglo-American Pharmaceutical
Co., Ltd.
Arrie, Ltd.
Ashton & Parsons, Ltd.
Beecham, T.
Beiersdorf, P., & Co.
Bile Bean Mfg. Co.
Bow's, Dr., Liniment
Box, W. H.
Capsuloid Co., Ltd.
Chameleone Oil Co.
Chesebrough Mfg. Co.
Christy, T., & Co.
Coleman & Co., Ltd.
Congreve, G. T.
Cox, A. H., & Co., Ltd.
D.D.D. Company
Daggett & Ramsdell
Daisy, Ltd.
Davenport, J. T., Ltd.
Davidson & Co.
Day & Sons (Crewe), Ltd.
Day, Son & Hewitt
Denoual, J., & Co.
Elliman, Sons & Co.
Fassett & Johnson
Faulding, F. H., & Co.
Fellows' Syrup
Fennings, Alfred
Ferris & Co.
Fulford, C. E., Ltd.
Genin, L., & Co.
Goodall, Backhouse & Co.
Grapelax, Ltd.
Greed, R. W., & Co.
Henry, T. & W.
Hughes, E. Griffiths
Ichthyol Co.
Iron-Ox Rem. Co., Ltd
Kaufmann, Dr.
Kay Bros., Ltd.
Kilmer & Co.
Knoll & Co.
Kutnow, S., & Co., Ltd.
Lalor's, Dr., Phosphodyne
Lambert Pharmacal Co.
Lincoln & Mid. Co. Drug Co.
Lofthouse & Saltmer
Lorimer & Co., Ltd.
Mandall & Co., Ltd.
Marmola Co.
Menley & James, Ltd.
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Oudem Corn Remedy Co.
Owhridge, W. T., Ltd.
Patey, W., & Co.
Phillips, Chas. H., Chemical Co.
Pollantin (Schimmel & Co.)
Resinol Chemical Co.
Richards, J. M., & Sons
Ruhwel Co.
Sangers'
Savanesse's Capsules (Evans)
Sekuritas
Squire & Sons
Standard Tablet & Pill Co.
Steelman's Teething Powders
Thermogene Co.
To-Kalon Mfg. Co.
Tunbridge & Wright
Wilcox, Jozeau & Co.
Wood's Peppermint Cure
Zotos, Ltd.
(See also DENTIFRICES and TOILET
ARTICLES)**PROP. ARTS. DEALERS IN**Barclay & Sons, Ltd.
Edwards, W., & Son
Evans Sons Lescher & Wehb, Ltd
Hovenden, R., & Sons, Ltd.
May, Roberts & Co.
Newbery, F., & Sons, Ltd.
Sangers'**PRESERVATIVES**

(See DAIRY ADJUNCTS)

PULVELLÆ

Warrick Bros.

PULVERETTES

Oppenheimer, Son & Co., Ltd.

PUMPS

Berkefeld Filter Co., Ltd.

QUININE MANUFACTURERSBoehring, C. F., & Soehne
Howards & Sons, Ltd.
Whiffen, Thos.**RAZORS**

Auto-Strop Safety Razor Co.

RENNETFullwood, R. J., & Bland
Oldfield, Pattinson & Co.**RESINS AND RESINOLDS**Allen, S., & Sons, Ltd.
Allen & Hanbury, Ltd.
Morson, T., & Son
Ransom, W., & Son
Smith, T. & H., Ltd.**RESPIRATORS**

Zimmer & Co.

RUBBER GOODSBaird Bros.
Burge, Warren & Ridgley, Ltd.
Daval Rubber Co.
Evans Sons Lescher & Wehb, Ltd
Fecher, M. J.
Galen Mfg. Co.
Haywood, J. H.
Hovenden, R., & Sons, Ltd.
Ingram, J. G., & Son
Maw, S., Son & Sons
May, Roberts & Co.
Schutze, F., & Co.
Warne, W., & Co., Ltd.**SACCHARIN**

Saccharin Corporation, Ltd

SALICINMacfarlan, J. F., & Co.
Smith, T. & H., Ltd.**SAMPLE CASES**Improved Mailing-case Co.
Keane, Thomas**SANTONIN**

Smith, B. A., & Co.

SAPONINField, C. W.
Hoffman-La Roche, F., & Co.
Sthamer, Dr. R.**SAUCES**

Goodall, Backhouse & Co.

SCALE PREPARATIONS

Morson, T., & Son

SEA SALT

Tidman & Son, Ltd.

SELTZOGENES

Aerators, Ltd.

SERUMS AND ANTITOXINSAllen & Hanbury, Ltd.
Evans Sons Lescher & Wehb
Parke, Davis & Co.
Wilcox, Jozeau & Co.**SHEEP DIPS**Burt, Boulton & Haywood
Sanitas Co., Ltd.
Tomlinson & Hayward, Ltd.**SHOP-FITTING**Ayrton-Graham, Ltd.
Bowling & Son
Cleworth, J.
Evans Sons Lescher & Wehb, Ltd
Josephs, P., & Son
Maw, S., Son & Sons
Mills, H.
Rudduck & Co.
Sangers'
Southall Bros. & Barolay, Ltd.**SOAPS**Allen & Hanbury, Ltd.
Armour & Co., Ltd.
Bronnley, H., & Co., Ltd.
Chesebrough Mfg. Co.
Cook, E., & Co., Ltd.
Erasmo Co., Ltd.
Gibbs, D. & W., Ltd.
Hull Oil Mfg. Co., Ltd.
J. S. W. Preparations, Ltd.
Lescol Perfumery Co.
Oakley, J., & Son, Ltd.
Pears, A. & F., Ltd.
Price's Patent Candle Co.
Richards, J. M., & Sons
Tidman & Son, Ltd.
Wright, Layman & Umney**SOCKS**Davis, J. M., & Sons
Solport Bros.**SOAP MATERIALS**

Chiris, Antoine

SOAPS, MEDICATEDArmour & Co., Ltd.
Bronnley, H., & Co., Ltd.
Calvert, F. C., & Co.
Capsuloid Co.
Duncan, Flockhart & Co.
Faulding, F. H., & Co.
Hearon, Squire & Francis, Ltd.
Lambert Pharm. Co.
Sanitas Co., Ltd.
Wright, Layman & Umney**SODA FOUNTAINS**British Automatic Aerators, Ltd.
Jackson, J. P., & Co., Ltd.**SODIUM BICARBONATE**Brunner, Mond & Co., Ltd.
Howards & Sons, Ltd.
Mumford, G. S.**SOOTHERS**Armstrong, M. D.
Cartwright, A. S., Ltd.**SOUTH AFRICAN AGENTS**Lennon, Ltd.
Murdoch, John, & Co.**SPARKLETS**

Aerators, Ltd.

SPECTACLESAnglo-American Optical Co.
Botwright & Grey
Darton, F., & Co.
Maw, S., Son & Sons
Raphael's, Ltd.**SPIRIT OF WINE**Burroughs, J., Ltd.
Preston's Liverpool Distillery**SPILLING-FLASKS**

Maw, S., Son & Sons

SPONGE BAGSMaw, S., Son & Sons
Toogood, W., Ltd.**SPONGES**Cresswell Bros. & Schmitts
Internatl. Sponge Importers
Keat, G. B., & Sons, Ltd.
Maw, S., Son & Sons
Sangers'**SPONGIO-PILINE**

Whitehead, R. B., & Bros.

SPRAYSBurge, Warren & Ridgley, Ltd.
Cook, Alfred, & Co.
Daval Rubber Co.
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co.
Newbery, F., & Sons, Ltd.
Parke, Davis & Co.
Wetmore, S. H., Co.**STARCH**

Mumford, G. S., & Sons

STOPPERSFletcher, Fletcher & Co.
Stipendium Stopper Co.**STOVES (HEATING)**

Clark, S., & Co.

SURGICAL APPLIANCESAllen & Hanbury, Ltd.
Bailey, W. H., & Son
Burroughs Wellcome & Co.
Curling, G. Wyman, & Co.
Ingram, J. G., & Son
Jackson, Rohrs, & Co., Ltd.
Mason Bros. & Chapman
Maw, S., Son & Sons
Offord Hygienic Truss Co.
Schutze, F., & Co.
Wood, Vincent
Warne, W., & Co., Ltd.**SURGICAL DRESSINGS**Baird Bros.
Beiersdorf, P., & Co.
Berliner, Arthur
Burroughs Wellcome & Co.
Curling, G. Wyman, & Co.
Dalmas, A. de St., & Co.
Galen Mfg. Co., Ltd.
Gimber, W.
Haynes, G., & Co.
Leslies, Ltd.
Liverpool Lint Co.
Macfarlan, J. F., & Co.
Maw, S., Son & Sons
Newsome, C.
Robinson & Sons, Ltd.
Southall Bros. & Barolay
Vernon & Co., Ltd.
Wood, Vincent
Woolley, J., Son & Co., Ltd.**SYNTHETIC PERFUMES**Boehring, C. F., & Soehne
Bush, W. J., & Co., Ltd.
Compagnie Morana
Murray, O., & Co., Ltd.

SYNTHETIC REMEDIES

Boehringer, O. F., & Soehne
Hoffman-La Roche, F., & Co.
Knoll & Co.

SYPHONS, S. W.

Aerators, Ltd.
Barnett & Foster
Brefitt, E., & Co., Ltd.
Camwal, Ltd.
Idris & Co., Ltd.

SYRUPS, FRUIT

Idris & Co., Ltd.

SYRUPS, MEDICINAL

Chemists' Co-operative Wholesale
Fellows' Med. Mfg. Co.
Fletcher, Fletcher & Co
Squire & Sons

TABLETS, COMPRESSED

Allen & Hanburys, Ltd.
Asche, O. F., & Co.
Bishop, Alfred, Ltd.
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Evans Sons Lescher & Webb
Hearon, Squire & Francis
Jackson, E. E.
Lloyd, T. Howard, & Co.
Martindale, W.
McKesson & Robbins
Parke, Davis & Co.
Pill, Tablet, & Capsule Alliance
Potter & Clarke
Sonthall Bros. & Barclay, Ltd.
Standard Tablet & Pill Co.
Wand Manufacturing Co.
Wander, A.
Warner, W. R. (Newbery)
Wright, Layman & Umney

TABLOID PRODUCTS

Barron's Wellcome & Co.

TARTARIC ACID

Boehringer, O. H., Sohn
Day Hill & Hodgkinsons

TEA

Genin, L., & Co.

TIN BOX MAKERS

Goodall, Backhouse & Co.
Huntley, Boone & Stevens
Shirley Bros., Ltd.

TOBACCO

Singleton & Cole, Ltd.

TOILET ARTICLES

Allen & Hanburys, Ltd.
Armour & Co., Ltd.
Auto-Strop Safety Razor Co.
Ayrton, Saunders & Co., Ltd.
Beetham, M., & Son
Berliner, Arthur
Blackie, R.
Boniton, J., & Co.
Bronley, H., & Co., Ltd.
Burgoyne, Burdidge & Co.
Burroughs Wellcome & Co.
Chesebrough Mfg. Co.
Christy, T., & Co.
Cook, E., & Co., Ltd.
Daggett & Ramsdell
Daisy, Ltd.
Edwards' Harlene Co.
Erasmio Co., Ltd.
Gibbs, D. & W., Ltd.
Halifax Co.
Hall, Forster & Co.
Harker, Stagg & Morgan
Hearon, Squire & Francis
Hovenden, R., & Sons, Ltd
Hygienic Co., Ltd.
J. S. W. Preparations, Ltd.
Kno-ska Co.
Lloyd, A., & Co.
Lloyd, A. S. (Hovenden)
Lorimer & Co., Ltd.
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Papier Poudré, Ltd.
Parke, Davis & Co.
Patey, W., & Co.
Quelch, H. C., & Co.
Richards, J. M., & Sons, Ltd.
Rowland, A., & Sons
Sangers'
Sanitas Co., Ltd.
Shirley Bros., Ltd.
Standard Tablet & Pill Co.
To-Kalon Mfg. Co.
Toogood, W., Ltd.
Woolley, J., Sons & Co., Ltd.
Wright, Layman & Umney

TOILET PAPER

Ford, Shapland & Co.
Newbery, F., & Sons, Ltd.
Townsend, J., & Sons

TOOTH STOPPING

Stevens, P. A.

TRADE-MARKS AGENTS

Barker, R. W.
Ford, Shapland & Co.

TRUSSES

Bailey, W. H., & Son
Haywood, J. H.
Jackson, Rohrs & Co., Ltd.
Offord Hygienic Truss Co.
Wood, Vincent
Woolley, J., Sons & Co., Ltd

TUBED SPECIALITIES

Christy, T., & Co.
Sangers'

VACCINES

Allen & Hanburys, Ltd.
Evans Sons Lescher & Webb

VALUERS

Alexander, H. P.
Baker, P. C.
Berdoe & Fish
Brett & Co.
Jackson & Co.
Orridge & Co.
Smith, F. W.
Tomlinson, T., & Son

VASELINE

Chesebrough Mfg. Co.

VERMIN-KILLERS

Danyaz Virus, Ltd.
Evans Sons Lescher & Webb, Ltd.
Farmer, F., & Co.
Harker, Stagg & Morgan
Kay Bros., Ltd.
Sanford & Son

VETERINARY MEDICINES

Chesebrough Mfg. Co.
Day, Son & Hewitt
Edwards, W., & Son
Elliman, Sons & Co.
Harvey & Co., Ltd
Lloyd, T. H., & Co.
Spratt's Patent, Ltd.
Tomlinson & Hayward, Ltd.
Walker, Troke & Co.
Wand Mfg. Co.
Wilson Vet. Mfg. Co.

VINEGAR

Grimble & Co.

WATER GLASS

Tomlinson & Hayward, Ltd.

WATERS, CONCENTRATED

Chemists' Co-operative Wholesale
Robinson, B., & Co., Ltd.
Spurway et Cie.

WAXES

Pink, F., & Co.

WEED-KILLERS

Burt, Boulton & Haywood
Tomlinson & Hayward

WHOLESALE DRUGGISTS

Allen & Hanburys, Ltd.
Alliance Drug & Chem. Co.
Bain's Bros. & Stevenson, Ltd.
Barron, Harvey & Co.
Bell, John, & Co.
Blackie, R.
British Drug Houses, Ltd.
Burgoyne, Burdidge & Co.
Burroughs Wellcome & Co.
Chemists' Co-op. Wholesale
Curling, G. Wymen, & Co.
Davy Hill & Hodgkinsons
Evans Sons Lescher & Webb
Ferrie & Co.
Goodall, Backhouse & Co.
Harker, Stagg & Morgan
Hearon, Squire & Francis
Hewlett, C. J., & Son
Lennon, Ltd.
Lloyd, T. Howard, & Co.
Lofthouse & Saltmer
Murdoch, John, & Co.
Oldfield, Pattinson & Co.
Pharmaceutische Handelsv.
Potter & Clarke
Raimes & Co.
Sankyo & Co.
Sonthall Bros. & Barclay
Warner, W. R. (Newbery)
Willows, Francis B. & T.
Woolley, J., Sons & Co., Ltd.
Woolleys, Ltd.
Wright, Layman & Umney

WINES

Burrough, J., Ltd.
Millar, A., & Co., Ltd.
Robinson, B., & Co., Ltd

WINES, MEDICATED

Burrough, J., Ltd.
Coleman, A., & Co., Ltd.
Fletcher, Fletcher & Co., Ltd.

WORM CAKES

Cox, A. H., & Co., Ltd.

ZINC OXIDE

Bain's Bros. & Stevenson
Hubbuck, T., & Son, Ltd.

OLDFIELD, PATTINSON & CO.

MANCHESTER.


TELEGRAMS :

"OPIUM, MANCHESTER."


A RELIABLE HOUSE FOR
All Pharmaceutical Preparations.CONCENTRATED WATERS.
CONCENTRATED INFUSIONS.**Syr. Hypophosphites Co. (NEWTON)**ELIXIR TERPINI ET HEROIN COMP.
THYMOLYPTOL.**"Silver Churn" Specialities.**BUTTER COLOURING
LIQUID ANNATTO
CHEESE RENNET
JUNKET RENNET

Special Prices to Large Buyers.

Write for List.



EVANS



Shop Fittings Department

A Customer writes as follows quite unsolicited:

"We feel we must congratulate you on the manner in which you have executed the transformation in our business premises. The windows are the 'talk of the town,' the admiration of all, and a credit to your firm. The whole work has been done in a marvellously short time, and the inconvenience to our business was really very small. Your workmen, too, seem most anxious to please, and whilst they study the interest of the firm who employ them, they certainly carry out all arrangements made and do not skip their work. We are highly satisfied."

We ask for inquiries for all descriptions of Shop Fixtures, Show Cases, &c., and can refer to numerous Customers.

EVANS SONS LESCHER & WEBB,
LIVERPOOL and LONDON. LIMITED.

REASON AND RESULTS.

If an article of toilet becomes in great demand, there must be a reason for it. It is either the sterling properties of the article in question, conscientious recommendations, or else it is caused by extensive advertising. Harlene, for "Hair Drill," is in that pleasing position owing to its popular and scientific method, its sterling properties, and successful and convincing publicity.

THAT IS THE REASON—AND THE RESULT

arising from this is an increasing demand for "Harlene Hair Drill" preparations which every chemist should be prepared to meet. If you do not notice any alterations in your sales, it is evident that the public are not aware that our goods are obtainable at your premises! May we send you some showcards and dummies to remind your customers? We shall be pleased to do so upon receipt of postcard.

If you have never stocked our preparations,
may we draw your attention to our offer given
below.

"HARLENE." <i>For the Hair.</i>		"UZON." <i>Brilliantine.</i>		"CREMEX." <i>Shampoo Powders.</i>	
Retail.	Wholesale.	Retail.	Wholesale.	Retail.	Wholesale.
No. 1 size, 1/- ...	11/- doz.	1 - ...	11 - doz.	1/- ...	11 - doz.
" 2 " 2/6 ...	27 3,,	2 6 ...	27/3 "	per box of 8 powders.	
" 3 " 4 6 ...	47/- "				

Subject to full trade discount of 20 per cent.

We are now prepared to supply goods to the value of £2 net (cash with order) as a trial stock, and will include costly advertising matter to assist the sales. This parcel may be made up to customer's requirements and is subject to full trade discount of 20 per cent.

Fully Illustrated Price List and further particulars sent post free from

EDWARDS' HARLENE CO., 95 & 96 High Holborn, LONDON, W.C.

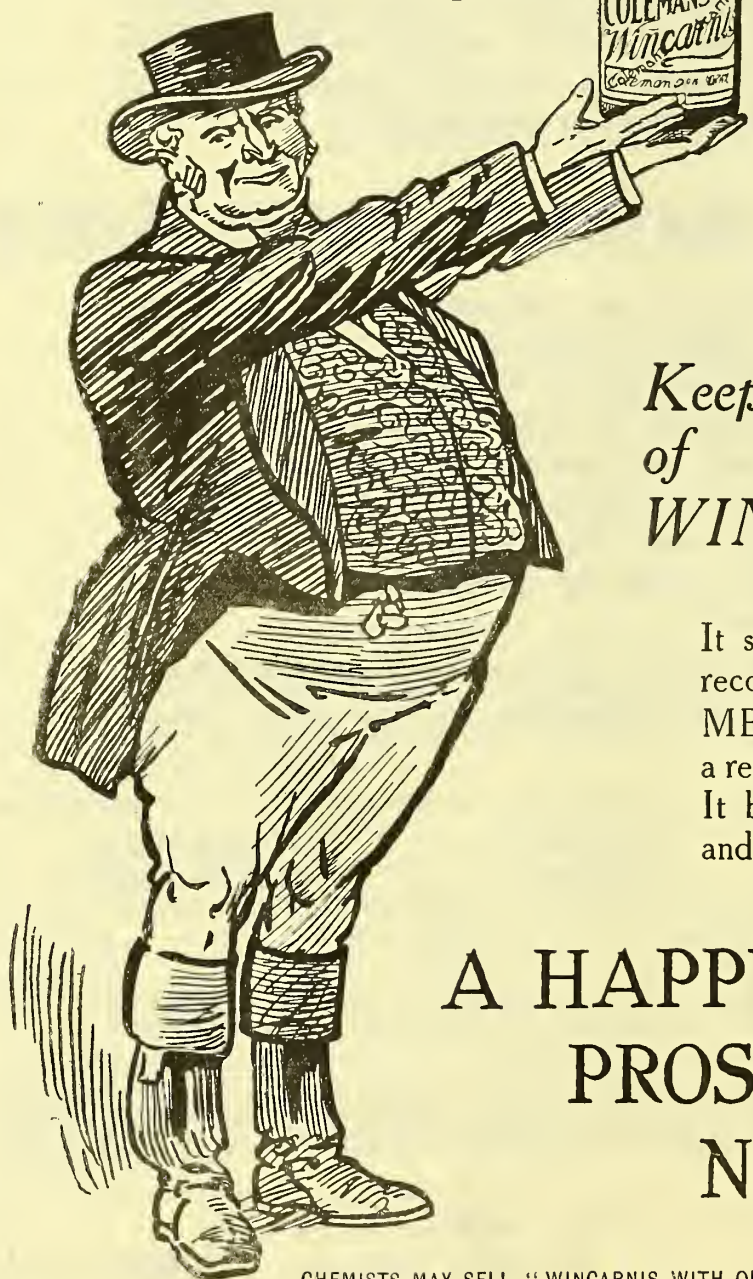
ADVICE TO CHEMISTS

FOR

THE NEW YEAR.

**Coleman
& Co., Ltd.**

WINCARNIS
WORKS,
NORWICH.



*Keep full stocks
of
WINCARNIS.*

It sells freely, for it is
recommended by 8,000
MEDICAL MEN as
a restorative for invalids.
It bears a good profit,
and helps to make . . .

A HAPPY AND PROSPEROUS NEW YEAR.

CHEMISTS MAY SELL "WINCARNIS WITH QUININE" WITHOUT A WINE LICENCE.

A PROCLAMATION, XMAS 1908.

**H.
Bronnley & Co. Ltd.**

*present their compliments to
the Chemists of the British
Empire and wish them the
greatest happiness and pro-
sperity in*

The New Year.



COURVOISIER'S PROPRIETARIES.

**STERLING MERIT,
BACKED BY
EFFICIENT ADVERTISING,
RESULTING IN
READY AND INCREASING SALES.**

VIOTTO PERFUME.

13 6, 26/-, 50/-, 94/-, 180/- per dozen nett.
1/5½, 2/9, 5/4, 10/3, 20/- per bottle retail.

VIOTTO SOAP.

21/- per dozen boxes nett.
2/6 per box of 3 tablets retail.

VIOTTO FACE POWDER.

11/6 per dozen boxes nett.
1/6 per box retail.

HAVANITA PERFUME.

16/-, 30/-, 54/-, 102/- per dozen nett.
2/-, 3/9, 6/9, 12 6 per bottle retail.

HAVANITA SOAP.

24/- per dozen boxes nett.
2/9 per box of 3 tablets retail.

MIMOSA (for the Hands).

7/-, 14/-, 28/- per dozen nett.
1/-, 2/-, 4/- per bottle retail.

ALL ENTERED ON THE P.A.T.A.

Of your Wholesaler, or direct from

H. BRONNLEY & CO., Ltd.

Acton Vale, London, W.

1709 (²⁰⁰ YEARS) 1909.

GENUINE ADVICE:

All Chemists should
see that the only
Eau de Cologne
they buy bears this label:



It indicates that the article is
THE GENUINE EAU DE COLOGNE
and it allows the retailer
a substantial guaranteed
profit and ensures
**A PLEASANT & PROSPEROUS
NEW YEAR**

SOLE AGENTS FOR GREAT BRITAIN AND IRELAND—

Messrs. J. & R. McCracken, 10 Bush Lane, Cannon St., LONDON, E.C.

Price Lists, Showcards, and other advertising matter will be supplied on application.

1909.

With the Compliments of
the Season



and
wishing
their
friends
a
happy
and
prosperous
New
Year.

S. Mawson & Sons,
7 to 12 ALDERSGATE STREET,
LONDON, E.C.

NEW YEAR.

Willows Francis Butler and Thompson Ltd.,

in wishing Chemists, at home
and abroad, the

COMPLIMENTS OF THE SEASON

desire to remind the trade that
they are the proprietors of
the old established
business of

HERRINGS & COMPANY

40 Aldersgate S^t London, E.C.

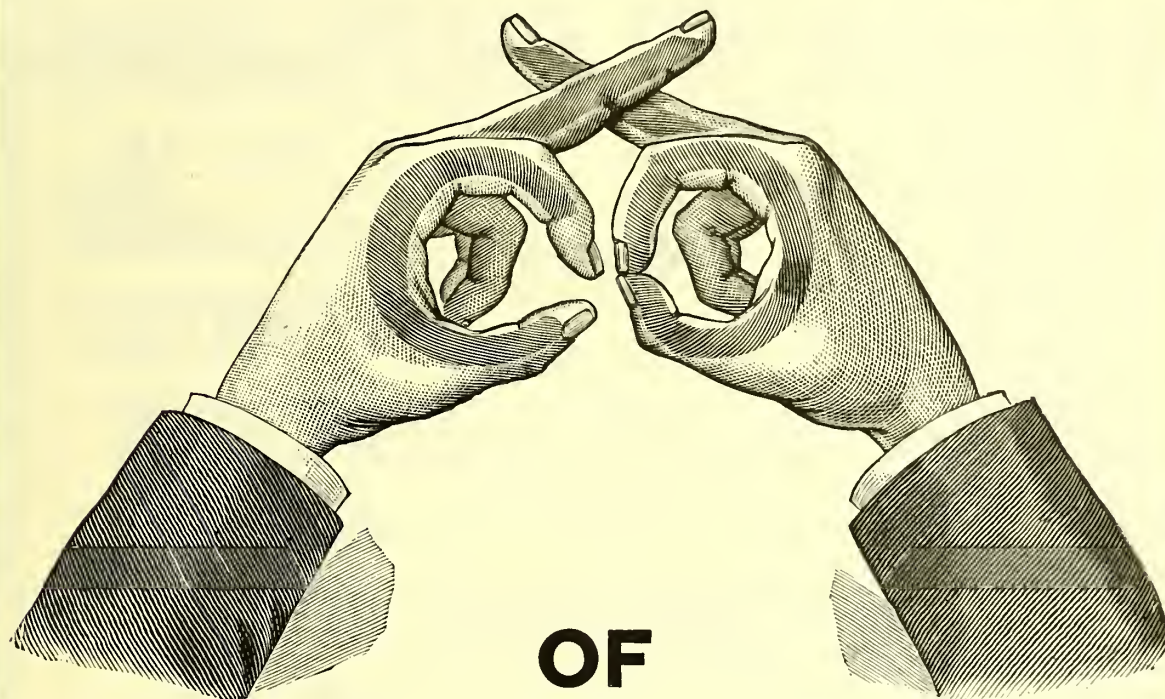
ANIMAL EXTRACTS.
GALENICALS:
CHEMICALLY AND
PHYSIOLOGICALLY
STANDARDISED

POWDERS:
GROUND ON
THE PREMISES
& GUARANTEED
PURE

Telegrams: "FORTY LONDON."

Telephone: 171 LONDON WALL.
12530 CENTRAL.

A SURE SIGN



OF PROFIT & PROSPERITY

IN THE COMING YEAR TO
ALL CHEMISTS WHO SELL
PILLS AND TABLETS.



ARTHUR H. COX & CO., LTD., BRIGHTON.

IDRIS

SODA WATER

LEMONADE

POTASH WATER

GINGER ALE

LITHIA WATER

GINGER BEER

**MEM:**

USE

ONLY

CHINAWAY

SYPHONS



**To All
Chemists
HEARTIEST
GREETING
AND
BEST
WISHES
FOR A
PROSPEROUS
NEW YEAR**

**IDRIS & CO. SUPPLY CIRCULARS AND SHOWCARDS, ALSO
GIVE THEIR AGENTS EVERY ASSISTANCE POSSIBLE TO
SECURE A GOOD TRADE IN IDRIS ROYAL TABLE WATERS.**

IDRIS & CO., Ltd., Camden Town, LONDON, N.W.

BRANCHES: Liverpool, Southampton, Canterbury, Teddington.
DEPÔTS: Bournemouth, Portsmouth, Margate, Ramsgate, Folkestone, Glasgow,
Letchworth (Garden City), Southend, Watford, Enfield.

Established 1855.

ROBINSON'S MULTUM IN PARVO



MAY ALL
HAPPINESS & PROSPERITY
BE
CONCENTRATED
ON OUR CHEMIST FRIENDS
THROUGHOUT THE WORLD
FOR THE COMING YEAR.

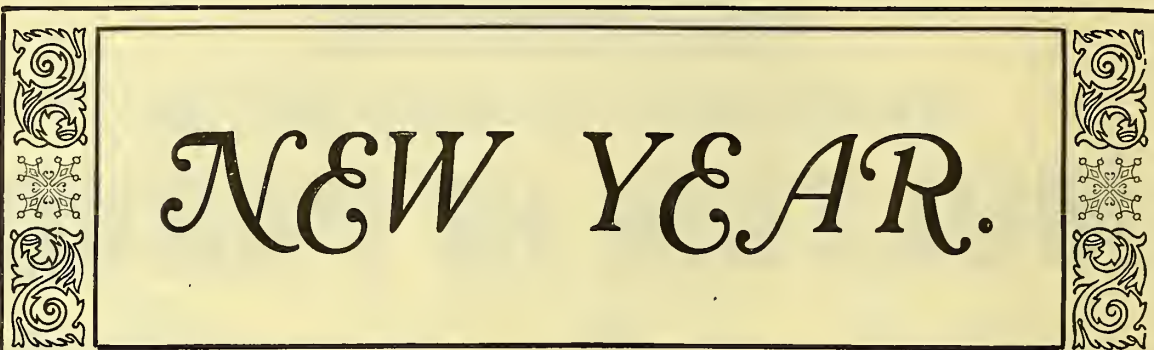
→ **CONCENTRATED WISDOM** ←
FOR 1909.

BUY ONLY
"THE ORIGINAL" ROBINSON'S CONCENTRATED WATERS.

QUININE WINE (Vin. Quininæ, B.P. 1898)
PURE ORANGE WINE (Vin. Aurantii, B.P. 1898)

B. ROBINSON & CO., Ltd., Distillers and Brewers of British Wines, **PENDLETON, MANCHESTER.**

TELEPHONE: 138 PENDLETON.



NEW YEAR.



DR. ALLINSON'S SPECIALITIES

ensure a living profit to
the retailer. They sell
readily and the prices are
fixed. Thus all chemists
who sell and friends who
use will gain

HEALTH, PROSPERITY AND HAPPINESS

through the coming year.

<i>Food for Babies</i>	<i>Brunak</i>
<i>Prepared Barley</i>	<i>Power</i>
<i>Wholemeal Bread</i>	<i>Breakfast Oats</i>
<i>Wholemeal Flour</i>	<i>Vegebutter</i>

THE NATURAL FOOD CO. Ltd.
BETHNAL GREEN, LONDON, E.



THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, JANUARY 2 1909.

PUBLISHER'S NOTICE TO ADVERTISERS.

Advertisers are desired to take note that the advertisements of Businesses for Disposal and Wanted, Situations Open and Required, Exchange Column, &c., belong to the **PREPAID CLASS**, and to ensure the due insertion of the **announcements the remittances must accompany the instructions**. A great amount of unnecessary correspondence is occasioned by the non-observance of this regulation, and the Publisher hopes that the advertisers will assist in the quick preparation and despatch of the Supplement by strictly observing this rule. Advertisements for the current issue cannot be received after 4 p.m. on Thursday in each week.

A Copy of this Supplement is inserted in every Number issued of "The Chemist and Druggist."

*The Winter of Discontent
is made
Glorious Summer
for Advertisers in The C.&D. Supplement.*

It pays to pay for advertising in it.

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

1.—LONDON, S.E. (Residential Suburb).—Ready-money Business, Retail, Prescribing, and Photographic; returns £1,270; attractive shop, double-fronted; roomy house; held on lease; valuation terms entertained.

2.—LONDON, S.W.—Established Business, Retail, Dispensing, and Photographic; returns £1,000, which produce a net income of £400 (about); full investigation courted; capital residence, with garden; private entrance; price £850.

3.—BALHAM (Near).—Modern Pharmacy; main thoroughfare; returns over £1,000; net profit £250; well-fitted shop, fully stocked; rent £60; long lease; roomy house, bathroom; price £650.

4.—LONDON, S.W.—Old-established Business, held by vendor 38 years; now retiring; returns over £400 per annum; scope for increase; comfortable residence; 21 years' lease; price £400.

5.—LONDON, E.C. (Main Thoroughfare).—Very old-established Business; returns under management about £12 weekly (present rate); scope for development; immediate sale desired; no reasonable offer refused.

6.—NORTH OF ENGLAND.—Modern Pharmacy, capitally situated in the centre of town; returns over £1,200; net profit £350; price £1,000; full investigation invited.

7.—WARWICK (Near).—Good-class Business, Retail and Dispensing; position unique; returns about £600; net profit 25 per cent.; modern fitted shop; good house; price £450.

8.—MIDLANDS.—Old-established Business, all good middle-class trading; returns average about £1,500 yearly; net profit £350; well-appointed shop, double-fronted; valuation terms entertained; death cause of sale.

9.—LEICESTERSHIRE.—General Retail Business, with excellent Optical connection; returns £1,200; net profit £350; large convenient premises; rent £45; price £800.

10.—HOME COUNTY (Market Town).—Retail, Dispensing, and Photographic; all good middle-class business; returns £368; gross profit £390; roomy house, and garden, held on lease; price £650.

11.—WALES.—Good-class Business; returns about £2,400 yearly; gross profit 50 per cent. (proof given); modern fitted shop, fully stocked; intending investors with about £2,000 at command will find this a sound investment.

12.—WILTS (Market Town).—Family Retail and Agricultural Business; established 1842; returns exceed £500; net profit £130; comfortable house and garden; rent £45, on lease; price £450.

13.—DORSET COAST.—Retail, Dispensing, Prescribing, and Photographic; all good middle-class business; returns £620; net profit £200; modern fitted shop, fully stocked; terms, simply the value of stock and fixtures.

14.—SURREY (Charming Locality).—Good-class Business, Dispensing, Prescribing, and Light Retail; established 70 years, and held by vendor 40; returns average over £1,200; net profit £360; further details on application.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co., desire to emphasize the necessity of a Periodical Statement of Account, by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties, and will make Special Terms for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON. — 2.

BRETT & CO.

VALUERS,

8 WEST ST., LEICESTER.

Telegrams, "Brett Leicester." Telephone 160 Y.

VALUATIONS have always had our special and personal attention, and an experience of thirty years is at your disposal.

AGENCY.—We have always a large number of *Buyers* on our books, and we can frequently find a *Purchaser* at once. We also have a *Private Register* for vendors who are in no hurry to sell, and who do not wish their businesses to be advertised.

STOCKTAKING SPECIALISTS to the Entire DRUG TRADE.

YORKS.—Splendid high-class Dispensing Business, with nice Photo and Optical connection; one of the best businesses in the district; old-fashioned, fine premises, which can be had on lease at moderate rent; returns £2,600; price, valuation only, about £1,000; grand opportunity.

MIDLANDS.—Good-class Light Retail, with Photo trade and nice Optical connection; splendid position in main street of busy town; returns £1,400; valuation of stock and fixtures.

YORKS.—Middle-class Retail and Dispensing and good Proprietaries; small Wholesale; large yard and garden, and excellent premises; very old-established; returns £800 (or thereabouts); price £350, or offer; this is a bargain.

BERKSHIRE.—Good-class Dispensing and Light Retail; very good Photographic connection; good house and shop; old established; returns £900; price £650; great scope for increase; references required.

LANCS.—Nice Light Retail Business with Photographic and Optics; good house and shop, at low rent; old established; returns £700; price £500, or any reasonable offer; very profitable; no patents stock.

HERTS.—Middle-class Retail with Mineral-water plant; very old-established; returns £10 per week, and can be greatly increased; price £325; good premises; moderate rent.

GLOUCESTERSHIRE.—Unopposed Light Retail, Photographic, and Dispensing; good shop and house; large garden; very old established; returns £550; net profit £200; price £425.

WARWICKSHIRE.—Very nice Dispensing and Light Business, with Photographic; good shop, in nice position of inland health resort; convenient house; returns £600; owing to sudden illness of vendor, will accept £450, or near offer; splendid opportunity.

Write us at once for our special terms for STOCKTAKING for 1909.

We are now booking dates. Correspondence cordially invited.

PARSON C. BAKER

174 VICTORIA ST., LONDON, S.W.

Recommended by—MESSRS. BARRON, HARVEYS & CO.
Telephone: MESSRS. MEGGESON & CO.
No. 27 Victoria. MESSRS. BARCLAY & SON, LTD.

N.E. COAST.—Old-established, good-class Retail and Agricultural Business, with small Wholesale; average returns about £1,800; net profit £400; recently refitted shop, and ample warehouse accommodation; rent £120; price about £1,200, which sum is the estimated value of stock and fixtures.

ACCRINGTON.—Retail, Photographic, and Optical Business; returns £750; rent £40; owner being anxious for a quick sale will treat purchaser liberally.

ISLINGTON, N.—Well-established, compact little Business; easily worked, and showing a net profit of £260; rent £50; 7-roomed house, with private entrance; good reasons for disposal; price about £350.

NORTH WALES.—Old-established Mixed Country Retail, with Photographic; returns over £1,000; rent £35, on lease; double-fronted shop, large warehouse; good house, with private entrance; good opening for Dentistry and Optics; price about £550.

LONDON, W.—Good-class Retail and Dispensing Business, conducted on Store lines; large shop and good house; returns £1,600; net profit £400; rent £120, on lease; partly let off; price about £850.

North of England Transfer Agency

FRED^K. W^M. SMITH,

CHEMISTS' VALUER,

3 BELGRAVE TERRACE, LEEDS,

has always a number of good Businesses for Sale, also Clients open to Purchase good, sound concerns. Strict secrecy. Correspondence solicited. Valuations for Transfer, Probate, and Stocktaking on reasonable terms.

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FOR
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Businesses Wanted and for Sale.
Employers' and Assistants' Engagements Undertaken.

MESSRS. BERDOE & FISH,

Chemists' Valuers and Transfer Agents,

35 JEWRY STREET, FENCHURCH STREET, CITY.

TELEPHONE: 1809 CENTRAL

Have the following Businesses for Disposal. (No charge to Purchasers.)

1.—**MIDLANDS** (Charming Health Resort).—High-class Dispensing Business; increasing; net profit nearly £300; elegantly fitted Pharmacy, and well stocked; good house; price £900, simply valuation.

2.—**YORKSHIRE.**—High-class City Business, in excellent position; returns about £1,250; net profit £345; handsome Pharmacy, fully stocked; price £1,000; strongly recommended.

3.—**HERTFORDSHIRE** (Busy Market Town).—Good-class Light Retail Business, in very best position; returns average £875; neglected; could easily be made do £1,200; good house and shop; price, valuation, plus small goodwill.

4.—**HAMPSHIRE.**—Light Family Retail Business, in small town, charming locality; returns over £900; excellent profits; low rent; attractive shop, well fitted and stocked; price £775; personally inspected and strongly recommended.

5.—**BERKSHIRE.**—Good-class Retail, Dispensing, and Photographic; returns over £1,100; good position; large shop; well fitted and stocked; large house and garden; price £750 or offer.

6.—**CESHIRE** (good Residential Town).—Good-class Retail and Dispensing; returns £700; excellent profits; shop is in a good position and well fitted and stocked; price £520; worth attention.

7.—**WILTSHIRE.**—Good-class Light Retail Business; easily worked; no opposition; returns £515; net profit £190; large house and garden, etc.; well-fitted shop, well stocked; price £450, or offer.

8.—**WEST KENSINGTON.**—Light Retail, Dispensing, and Prescribing Business; returns nearly £1,400; net profit £391; well-fitted Pharmacy and good stock; large house and garden; price £850.

9.—**CITY.**—Good-class City Business; entirely under manager; returns £13 to £14 weekly; will do £20; well-fitted shop, good stock; price £350.

10.—**SOUTH-WEST OF ENGLAND.**—Good-class Family Retail, Dispensing, and Prescribing, with Dentistry; returns £5,000; net

profit £600; excellent position; low rent; convenient premises; same hands many years; price £2,000.

11.—**COUNTY DURHAM.**—Partnership for Disposal in good-class Retail and Dispensing business; splendid position in large town; returns nearly £1,850, increasing; stock and fixtures worth over £1,300; price £650 for half-share.

12.—**SURREY.**—Good-class Family Retail and Dispensing Business; returns over £1,000 under manager; net profit £300; very good position; scope for much increase; price £750; personally inspected.

13.—**LANCS.**—Light Retail, Dispensing, Prescribing, and Optics; returns £700; no patents sold; net profit £250; handsome shop, well stocked; offer wanted; part can remain; strictest investigation courted.

14.—**YORKSHIRE** (Inland Health Resort).—High-class Retail and Dispensing Business; charmingly situated; returns about £550, increasing; modern Pharmacy, well fitted and stocked; price £375.

15.—**SOUTH-EAST COAST.**—Light Family Retail and Dispensing, with Photographic trade; returns £900; net profit £250 clear; central position; comfortable house; price £500; fullest investigation invited.

16.—**HOME COUNTY.**—Unopposed Village Business; no side-lines; returns average £600; low rent; on lease; good house and garden; pleasantly situated; price only £250.

17.—**LONDON, S.E.**—Light Retail, Prescribing, and Dispensing, in rapidly growing suburb; returns £1,270, increasing; good house; large, well-fitted shop; rent £60; price £500 and stock at valuation; lump sum offer entertained.

18.—**LONDON SUBURB.**—Very profitable Cash Retail and Prescribing Business; no cutting; returns £550, increasing each month; double-fronted shop; modern fittings; good stock; rent £30; price £525; trial allowed.

STOCKTAKING.

Every modern Chemist knows that Stocktaking is a necessity, but is he aware of its immense value and importance in connection with FIRE INSURANCE and preparing a BALANCE-SHEET? If not, he should at once turn up page 115 in the "C. & D. Diary, 1909," and carefully read our advertisement on this subject, and then write for our special terms for doing this work.

J. G. BERDOE established the firm in 1870, and W. S. FISH was apprenticed to him in

Do you require the services of an **EXPERT Valuer** at one half the usual fees?

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We are buyers and sellers of anything or everything for Chemists.

JACKSON & COMPANY,
Chemists' Brokers, 16 Stratford Avenue, ROCHDALE.

TOMTOM

Telegraphic Address.

THOS. TOMLINSON & SON.
Chemists' Valuers and Expert Stocktakers,
Businesses transferred privately.
29 NEW CANNON STREET, MANCHESTER.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents, or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

BUSINESSES FOR DISPOSAL.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

COLONIAL BUSINESSES.

We call the special attention of our Colonial subscribers to the opportunity this Supplement affords when they wish to dispose of their Businesses, of getting into touch with likely buyers either at home or in the Colonies.

Replies to Advertisements may be addressed to this Office and forwarded to the Advertiser for an additional charge of 6d. Trade circulars and samples can in no case be forwarded.

LONDON Suburb.—Profitable Retail; turnover £550; net profit over £200 per annum; handsomely fitted shop; comfortable house; low rent (£30); lease; an increasing business in growing neighbourhood, and open to any investigation; owner leaving trade to superintend manufacturing concern; price £300. Apply, 97/20, Office of this Paper.

MANCHESTER.—Old-established, high-class Dispensing; handsomely fitted in solid mahogany and well stocked; good house; returning about £930 per annum, and good prices. Address, "Rhei," c/o Southall Bros. & Barclay, Ltd., Birmingham.

MANCHESTER (centre Populous Residential Neighbourhood).—No immediate opposition; Retail, Dispensing, and Speciality Business; owner leaving trade; returns, under partial neglect (owing to bad health), £500 to £600; few Patents; good profits; obvious scope for increase on Store lines; well fitted; price £450, or reasonable offer. Apply, "Pioneer" (96/37), Office of this Paper.

MIDLANDS.—Country Business near Chesterfield; returns £900; Side-lines, Optics and Dentistry; corner shop; best position in town; population 3,000; an excellent opportunity for smart man. Apply, "Radix," c/o Evans Sons Lescher & Webb, Ltd., Hanover Street, Liverpool.

SOUTH COAST.—Population 20,000, rapidly growing; for Sale, good-class profitable Business in main thoroughfare; returns for last six months average £100 per month under indifferent management; steadily increasing; few patents; sound reasons for selling; heavily stocked; price £875, or stock could be reduced to suit purchaser; no agents. 97/34, Office of this Paper.

SOUTH COAST (Fashionable Winter Resort).—Good-class Retail Dispensing and Prescribing Business for early Disposal; returns £950, at good profits; scope for increase; modern Pharmacy; well fitted and stocked; good residence; family reasons for selling; price about £650; books properly kept; good introduction will be given. "Coast" (102/38), Office of this Paper.

S.E. DISTRICT.—An old-established (over 40 years) Retail, Dispensing, and Prescribing Business; main road position, in very busy centre; returns £520; splendid opening for Dental or Photographic business; price £300, or near offer to immediate purchaser. Apply, Puttick & Wellington, 270 Lavender Hill, Clapham Junction.

SOUTH ENGLAND.—Dental practice, including stock and furniture, over 25 years' standing, for Disposal; price £650; net profit over £300 per annum; will introduce under agreement paying salary first three months; references required. 98/1, Office of this Paper.

SOUTH WALES (Coast Town).—Death vacancy; high-class Business; Prescribing, Dispensing, Photographic, Optics; returns £2,383 on five years' average; salaries £50; rent £70; valuation terms; finest business in the town, and well fitted. For particulars apply "235," Evans Sons Lescher & Webb, Ltd., Business Transfer Department, 60 Bartholomew Close, London.

SURREY.—Small Light Retail and Prescribing Business for Sale; nearest opposition 10 minutes' walk; growing district; good reasons for selling. "Bctol" (94/24), Office of this Paper.

WEST OF ENGLAND (Somerset).—A modern Cash Light Retail Business, with Dispensing; in a populous seaside resort; situated in growing locality; well fitted; good house; moderate rent; price £180 or valuation. Particulars, "Statim," St. Andries, Severn Road, Weston-super-Mare.

YORKSHIRE.—Splendid paying Business for Disposal owing to ill-health; situated in main thoroughfare of large town; capable of great increase; returns nearly £1,250; net profit £350; no reasonable offer refused. Apply, 99/16, Office of this Paper.

CHEMISTS, Opticians, Photographic Supplies, with Post-office: North of England; established 50 years; profits £200 yearly (post-office pays £45); beautifully fitted; main road; everything, £425; part of money can remain at 6 per cent.; present proprietor will remain a short time; chance in a lifetime. Express Business Co., 74 Victoria Street, Manchester.

DENTAL and Chemist's Business at Whitley Bay for immediate Sale, owing to death of proprietor, who has for the past nine years successfully carried this on, including Dental Optics and Photography as side-lines; value of stock, fittings, etc., is £590; will accept £475 or best offer; returns last year £900. Full particulars to "Business," c/o John Ismay & Sons, Wholesale Druggists, Newcastle-on-Tyne.

MANUFACTURING town, near Manchester; genuine old-established Cash Retail, with Wines and Spirits; returns nearly £650; rent £30; low price to quick buyer. Apply, "Business" (98/23), Office of this Paper.

THOROUGHLY genuine Business; small market town in Kent; population 2,500; no other Chemist; nice house, large garden, etc.; net profit over £300; price £650; can be considerably increased. 98/26, Office of this Paper.

TO Buyers.—Genuine Business; South Coast; Photography, Prescribing, Dispensing, Light Retail; nice house; fine situation; long lease; returns nearly £500; excellent stock. Barton, Business Transfer Agent, Folkestone.

BUSINESSES FOR DISPOSAL

(continued.)

TO CHEMISTS AND DRUGGISTS.—For Immediate Disposal, Businesses in South London.—Lease about 16 years to run; rent £60, increasing to £65; good shop and living accommodation; turnover steadily increasing; last year £1,270; price, for lease, fixtures, and goodwill, £500; stock (cost about £600) at valuation.

Lease about 14 years to run; rent £95, increasing to £110; exceptionally well-fitted double-fronted shop; upper part sublet at £30 per annum; nominal price for lease, goodwill, and fittings; stock (cost about £200), etc., at valuation. Offers of a lump sum for both or either of the above Businesses will be considered. Francis Nicholls White & Co., Chartered Accountants, 14 Old Jewry Chambers, London, E.C.

£25 cash, small balance arranged; cheapest Business worth having ever advertised; aged vendors' failing health compels sale; shopping centre; busy street, N.W.; practically unopposed; surrounded by dense population and near extensive good-class residential neighbourhood minus shops; rent 15s.; shop and parlour; purchaser adopting modern methods must do well; population 140,000. 102/21, Office of this Paper.

SALES BY AUCTION.

UNDER DEED OF ASSIGNMENT.

Re MESSRS. FORSHAW & ELLISON, 138 WESTGATE, BRADFORD.

MESSRS. JACKSON & CO. have received instructions from the Trustee, Mr. Arthur Stocks, Chartered Accountant, Halifax Commercial Bank Chambers, Bradford, to **SELL BY AUCTION**, without reserve, at the above address, on **WEDNESDAY**, the 6th day of **JANUARY, 1909**, the whole of the Stock, Fixtures, and Trade Utensils of a Chemist, comprising Counters (Mahogany), with Glass Cases in front, Dispensing Department, Counter Cases, Wall Casing, Window Enclosure with Glass Shelves and Brackets, Safe, Drug Fixtures, Shop Rounds, Chemists' Sundries, Patent Medicines, Sponges, Perfumes, Scales and Weights, Large Mirror, Shop Chairs, Linoleum, Steps, and all sundry articles connected with a good-class Chemist's and Druggist's business.

Sale to commence at 11 A.M. prompt.

On view from 9 A.M. on morning of sale.

Auctioneers' Office, 16 Stratford Avenue, Rochdale.

FOR SALE.

ENTIRE modern Fittings, nearly new, comprising counter fitted with drawers and glass cases, desk and perfume case, wall-cases, mirrors, dispensing-counter, check-till, window-enclosures, glass shelving, mortars, pill-machine, scales and weights, etc.; cost £185; will accept £65. Apply, Wing, Chemist, 69 Powis Street, Woolwich, S.E.

THE entire Stock of Drugs, Shop Rounds, and Trade Accessories of a modern Pharmacy for immediate Disposal, or would be sold as a going concern at about half valuation; the circumstances being exceptional, this may prove worth consideration by a gentleman of small means; immediate inquiry necessary. "Aspirin" (99/12), Office of this Paper.

TO LET.

TO be LET.—Carlton, Nottingham.—Old-established Chemist Shop, centrally situated on main thoroughfare; good living accommodation; not been empty previously for 25 years; rent low; sure living; immediate possession. Smith, Estate Agent, Carlton.

AGENCIES.

CHEMISTS as Agents.—Advertiser would like to get into touch with one or two Travellers (commission men only) to put down as Agents for an easy-selling line; good commission offered. 158/46, Office of this Paper.

TO Commission Agents.—A really good line is offered to Travellers calling on Merchants and Chemists holding Wine Licence; correspondence invited. 58/31, Office of this Paper.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond, prepaid.

This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of advertisers who use a number or nom de plume.

RETAIL.

BALHAM.—By January 23, reliable Assistant; married, no family; house found; qualification not essential if competent and energetic; knowledge of Photography necessary; references must be absolutely satisfactory; abstainer preferred. "Aspirin," 13 Ramsden Road, Balham, S.W.

Replies to Advertisements may be addressed to this Office and forwarded to the Advertiser for an additional charge of 6d. Trade circulars and samples can in no case be forwarded.

BOMBAY.—Qualified Assistant wanted for Drug Department of large General Store; salary 250 rupees per month, rising 20 rupees per month per annum; 4 years' agreement to be signed; room supplied, but not board; young man preferred who has had experience in quick business in this country; must be steady and reliable and willing to make himself generally useful. Apply to "Chemical" (97/90), Office of this Paper.

BUXTON.—Wanted, early in January, qualified Assistant with good-class Dispensing experience; outdoors. Apply, with photograph and full particulars, to J. J. E. Pugh, St. Ann's Pharmacy, Buxton, Derbyshire.

CAMBRIDGE.—Wanted, a qualified Assistant (indoors), with good all-round experience; must be of good address and have satisfactory references. Apply, with photo (if possible) and stating salary required, to Beall, 15 Chesterton Road, Cambridge.

CAPE COLONY.—Qualified Assistant wanted to manage (single-handed) Branch business in small town in healthy, pastoral district; one with experience of selling Photographic and Optical goods; quiet, respectable, church-going man; fair salary; if passage paid 5 years' agreement will have to be signed. Apply, with particulars of experience, to "Cape" (97/9), Office of this Paper.

CARDIFF CITY MENTAL HOSPITAL (Asylum for the County Borough of Cardiff).—Lady Dispenser required; single; must hold certificate of Royal Pharmaceutical Society; salary £60 per annum, with dinner daily. Particulars of duties contained in the form of application forwarded by the undersigned on receipt of a stamped addressed foolscap envelope, The Medical Superintendent, Cardiff Mental Hospital, Whitechurch, near Cardiff.

CHINA.—Junior qualified Assistant, about 24; three years' agreement; short hours; liberal terms; passage paid out and home. Apply, Dakin Brothers, 82 Middlesex Street.

CITY.—Junior or Improver (outdoors), at once, principally for stock; hours 8.30 A.M. to 9.30 P.M., with one day a week off from 10 A.M. Apply, with full particulars, to Owen, M.P.S. (late Oldfield), Chemist, Imperial Buildings, Ludgate Circus, E.C.

CLIFTON (Bristol).—For January 15, an unqualified Junior; indoors; aged about 22; accustomed to high-class business; good handwriting essential. State salary and enclose photo to Gilcs, Schacht & Co.

COVENTRY.—A Junior Assistant (indoors) for Light Retail and Dispensing. G. W. Jelley, Smithford Street, Coventry.

ITALY.—Wanted, at once, smart qualified Assistant, of good appearance and address, for high-class pharmacy; previous Continental experience preferred, but not essential. Give full particulars and enclose photo, H. Roberts & Co., English and American Chemists, Florence, Italy.

JAPAN.—Junior qualified Assistant (about 24) in old-established English Chemist's; good climate; short hours; passage paid out and home. Apply, 152/34, Office of this Paper.

LIVERPOOL.—Wanted, a qualified Branch Manager (outdoors). State age, experience, and salary to W. T. Warhurst, Ltd., 1 Gower Street, Bootle, Liverpool.

LONDON, W.—Part-time Assistant; evenings 6 to 9, and alternate Sunday duty 10 to 6 P.M. Apply, personally preferred, to H. H. Long, 48 Dorset Street, Baker Street, W.

LONDON, S.W.—Assistant (Junior), qualified, good address and experience, for first-class Retail and Dispensing business where 3 or 4 are engaged and duty divided; please give full particulars, salary, etc. Apply, Mr. R. A. Robinson, W. Malden & Co., 195 Brompton Road, South Kensington, London, S.W.

LONDON, S.W.—Immediately; indoors; a young qualified Assistant who has been accustomed to good-class business; two kept; personal application preferred. W. P. Robinson, Deane & Co., Pharmaceutical Chemists, 17 The Pavement, Clapham Common (close to Clapham Common Station, City & South London (Tube) Railway).

LONDON, N.W.—Wanted, qualified Assistant (indoors), age about 26, to Manage branch; Dispensing and Light Retail. Apply to A. J. Hall, Chemist, 196 Belsize Road, N.W.

LONDON, S.E.—Immediately, Junior Assistant; not under 23; accustomed to first-class business only; Dispensing, Light Retail, and Photography; indoors preferred. Apply, personally, or enclose photo, stating height, experience, references, and salary required, to Barnes & Marsh, The College Pharmacy, 79 Park Road, Dulwich, S.E.

LONDON.—Wanted, reliable and energetic outdoor Assistant, with good business qualities. Apply personally, if convenient, or, if writing, state particulars of last two situations, H. T. Hines, 86 High Street, Whitechapel, E.

LONDON, W.—Required, qualified Dispenser and Counterman of good address. Write, Manager, Morny Freres, Ltd., 201 Regent Street, W.

LONDON, S.W.—Wanted, a Junior (about 25) accustomed to good-class trade; good Window-dresser; outdoors; personal application preferred. Lloyd, 125 St. John's Hill, Clapham Junction, S.W.

LONDON, S.W.—Assistant, outdoors, for good-class Retail; must be good Dispenser; time for study if desired. Apply, with full particulars (in confidence), to "Chemicus" (103/7), Office of this Paper.

LONDON, S.E.—Young qualified Assistant wanted, at once; indoors. Jones, 161 New Cross Gate, S.E.

LONDON, W.—Wanted, smart, young, qualified Assistant for Counter; and qualified Dispenser; both must have good references and experience. Apply the Manager, S. F. Goss, Ltd., 460 Oxford Street, W.

LONDON, S.E.—Smart, active Junior of good experience for Retail and Prescribing business; indoors; comfortable home. Applicants please state age, height, experience, and salary required in first letter to "P. J." (103/17), Office of this Paper.

LONDON, N.—Qualified Manager, not over 35 years; hours 8.30-10 P.M.; one day holiday weekly; Sunday duty alternate evening only. Apply, enclosing photo (to be returned), stating salary required, "X" (103/24), Office of this Paper.

LONDON, S.W.—Manager, live on premises, with knowledge of Optics, and Extractor preferred; must be able to take charge at once. Apply personally, after 11 o'clock, 761 Garratt Lane, Tooting, S.W.

SOUTH COAST.—Doctor requires a male qualified Dispenser and Bookkeeper; outdoors; state full particulars and qualifications, whether single or married, and salary wanted. Apply, 98/9, Office of this Paper.

TONBRIDGE, KENT.—Wanted, early in January, Junior Assistant for Light Retail, Dispensing, and Photographic business; indoors. Apply, stating age, experience, salary required, etc., to F. G. Abel, 132 High Street, Tonbridge.

WESTON-SUPER-MARE.—Wanted, an Assistant (indoors); accustomed to good-class Dispensing and Light Retail. Send full particulars, with photo (if possible), Edwin Norman, Pharmaceutical Chemist, 35 High Street, Weston-super-Mare.

WESTON-SUPER-MARE.—Wanted, a qualified Assistant (indoors) for Dispensing and Light Retail. Send full particulars, with photo if possible, John Cooper, Pharmaceutical Chemist, Weston-super-Mare.

WHITCHURCH.—Wanted, Junior Assistant for Light Retail and Dispensing. Apply, with usual particulars, stating salary required (indoors), to L. Lee, Chemist, Whitechurch, Salop.

WORKSOP.—Wanted, qualified Assistant; Mixed business. State age, salary, send photo with particulars to T. Marris & Co., Ltd., 83 Bridge Street, Worksop.

BRANCH Manager for Colliery district; Welsh speaking; abstainer; one seeking permanency; must be thoroughly reliable. Photo and particulars to "Cymro" (87/28), Office of this Paper.

CHEMIST-OPTICIAN, capable of taking entire charge in Lancashire manufacturing town; easy hours; weekly half-holiday; no Sunday duty; preference given to one who would join as Partner, with hope of early succession. Reply fully, stating Pharmacy and Optical qualifications, to "Lancashire" (98/4), Office of this Paper.

DISPENSER, Bookkeeper, and Chauffeur.—Any gentleman desirous of filling an appointment as such to doctor in West Riding of Yorkshire, please apply, stating age, experience, qualifications, references, whether abstainer, and salary required, to 99/35, Office of this Paper.

E. C. PERKS & CO., 1 Sloane Square, S.W., require a qualified Assistant; indoors.

ERNEST MATTHEWS, LTD., Chemists, Royston, Herts, require a registered Chemist about middle of January; outdoors; hours moderate; no Sunday duty; weekly half-holiday; Agricultural experience desirable. Please state particulars and salary required in first letter.

HAYWARDS, Store Chemists, require, immediately, Junior as second assistant, for their Walsall establishment; high-class trade only. Full particulars in first letter to Horace D. Hayward, Chemist, Walsall.

J. L. CHAPLIN & SON, Pharmaceutical Chemist, Wakefield, are in want of a qualified Assistant, not over 25 years of age, outdoors, by the middle of January 1909. Reply at once, stating salary required and usual particulars.

JUNIOR Assistant; unqualified; outdoors. Full particulars of experience, age, height, and salary required, enclosing photo to H. W. Bryan, The Pharmacy, Portishead, Som.

MESSRS. PLAISTER & CO., 13 Gledhow Terrace, South Kensington, require a qualified indoor Assistant, about 23 years of age; must have had good Dispensing experience.

QUALIFIED Manager for Branch, end of January; must be thoroughly reliable and able to produce good references; good salary and commission to suitable man. Apply, with full particulars in first letter, to T. H. Pritchard, Cash Chemist, Abertillery. Applications not replied to in four days declined.

QUALIFIED Assistant, married, and about 30 years of age, as Manager for Cash Drug-stores in London, E.; good salary and commission; free house; first-class references required. Apply, 102/35, Office of this Paper.

SITUATIONS OPEN *(continued).*

UNQUALIFIED Assistant wanted, at once; indoors; Dispensing, Retail, and some Photography. State age, experience, and salary required to W. B. Nelson, 4 Macleod Road, W. (Addison Road nearest station).

UNQUALIFIED Assistant, between 30 and 40 years of age, for good-class Retail and Dispensing in residential suburb of Newcastle-on-Tyne; must be abstainer, of good address and appearance, and thoroughly competent; only first-class men need apply. Apply, giving full particulars, salary, enclosing photo (returnable), 99/2, Office of this Paper.

WANTED, a qualified Junior (indoors) with good Dispensing experience. Call or write, enclosing photo with full particulars, to C. White, Chemist, 45 Buckingham Palace Road, S.W.

WANTED, Manager, qualified, strictly sober and trustworthy, for small branch in working-class district in large town in the West; weekly half-holiday; one with Agricultural and Prescribing experience preferred; over 40 no objection. State salary, age, height, photo, etc., to "Ipecac." (94/33), Office of this Paper.

WANTED (at once), qualified Assistant; brisk Counter business, London, S.W.; must have good references; permanency to suitable man. Apply, giving full particulars, age, experience, and salary required (if married can live on premises), to 97/50, Office of this Paper.

WANTED, qualified Assistant to manage Branch; one with a view to purchase preferred. Apply, enclosing photo and copies of testimonials, to Adam, Pigott Street, Birmingham.

WANTED, immediately, smart young man (about 21) who has had experience in Stocktaking and Pricing (latter essential); comfortable and permanent berth to a satisfactory applicant. 158/466, Office of this Paper.

WANTED, immediately, a qualified Assistant, not over 35; must be well recommended, have a gentlemanly appearance and address, and be a good Salesman. Applications (personal preferred) must contain full particulars as to age, height, experience, references, recent photo, and salary required (outdoors), Parson C. Baker, 174 Victoria Street, S.W.

WANTED, a qualified Senior Assistant; one accustomed to high-class Dispensing business; to live on premises; married, without family preferred; age about 30. Send full particulars, qualifications, experience, when disengaged, also enclose photo, to "H." c/o Barron Harveys, 6 Giltspur Street, E.C.

WANTED, qualified Assistant, about 25. Reply, stating height, references, experience, and salary required, to "Metol" (159/25), Office of this Paper.

WHOLESALE.

A LEADING London Optical house have a vacancy for a Show-room Salesman; he would eventually be expected to take the post as Traveller either at home or abroad; previous Wholesale experience preferred, but not indispensable; S.M.C. qualification desirable; liberal terms would be made with a gentleman of undoubted good character and address; communications will be received in strict confidence, and applicants must state full particulars of their present position, age, and wages expected. Apply, "Enterprise" (154/59), Office of this Paper.

BOOKKEEPER (experienced), to take entire charge of office in wholesale sundriesman; knowledge of Instruments an advantage; good prospects to competent man. Send full particulars of experience and salary required to "Brush" (158/71), Office of this Paper.

EXPERIENCED Traveller wanted, calling upon Chemists, Wholesale and/or Retail, to work several useful Side-lines; small samples and liberal commission. B. Bullock, Ltd., Dewsbury.

PERFUMERY.—Traveller wanted for Eastern Counties between Humber and Thames; one other agency not objected to. Apply stating full particulars, to 74/26, Office of this Paper.

PRACTICAL Pill-maker wanted by London Wholesale firm; experienced in the Manufacture of Pills by hand, and with sound knowledge of all kinds of Coating. State wages, 97/15, Office of this Paper.

TRAVELLER required, for London, thoroughly experienced in Fruit Essences, Essential Oil and Colour trade. State experience (connection, if any) and salary required, "Ocols" (94/15), Office of this Paper.

TRAVELLERS, with other Agencies, wanted to sell on commission 2d. "Nyto" Shampoo Powder, for killing vermin on the head, to Chemists, Hairdressers, and Stores; every dealer would buy anything from a 2-doz. box to a gross; they sell like ripe cherries. Apply, "Nyto" Co., 2 Patterson Road, Nottingham.

WANTED, by a very old-established house, a smart Salesman, who is already calling on Chemists, to take up and push as a Side-line the sale of a first-class Household Remedy for all Aches and Pains; extensive advertising scheme to commence immediately, to support his efforts; good remuneration to really good man. Apply, enclosing photograph and all necessary information, to "Chemicus" (157/60), Office of this Paper.

WANTED, by old-established firm of Wholesale Druggists, an experienced Traveller with thorough knowledge of the trade, including Packed Goods and Sundries. Apply, with full particulars of experience, salary required, etc., to "Alpha" (156/56), Office of this Paper.

WANTED, man with experience in the office detail of Surgeons' Wholesale trade; one able to take temporary charge during absence of principal. Apply, stating age, previous experience, two references to whom to apply, also state salary required, to 157/42, Office of this Paper.

PERFUMERY.—Traveller wanted for Yorkshire, Durham, and Northumberland; one other agency not objected to. Apply, stating full particulars, to 74/62, Office of this Paper.

BUSINESSES WANTED.

MANCHESTER (near).—Advertiser is open to purchase a Chemist's Business; turnover from £800 to £1,500; or would entertain Partnership in larger concern. State fullest particulars in confidence (no agents) to 102/13, Office of this Paper.

ADVERTISER wants Business, in or within easy reach of London, giving net profit about £250, with scope for increase; no Dentistry; or would give £5 bonus for any information, if acted upon, re opening new business. "A. H. P.," 79 Helix Road, Brixton Hill, S.W.

ADVERTISER (32), first-class Prescriber, desires established Chemist Shop (medium size) in London in well-populated neighbourhood; terms cash and payments. State full particulars, lowest terms, etc. (in confidence), 103/6, Office of this Paper.

MESSRS. BERDOE & FISH, having been successful in recently disposing of a large number of Businesses, are in immediate want of sound concerns in London and all parts of the country for cash buyers from £300 to £3,000; strictest confidence guaranteed; correspondence cordially invited from intending vendors. Address, 35 Jewry Street, Fenchurch Street, London, E.C.

WANTED, small, sound Drug Business; country or suburban preferred; fair house attached; must stand investigation and be able to show books and invoices; full particulars in first letter; applications not answered in three days respectfully declined. "Alpha" (99/7), Office of this Paper.

PARTNERSHIPS.

PARTNERSHIP offered to gentleman with £500 in sound Wholesale and Manufacturing Business with an extensive connection among Chemists, Grocers, Oilmen, etc., and showing an exceptional good income and no liabilities; principals only need apply. Address, 103/1, Office of this Paper.

WANTED, qualified Partner in large Retail Mixed Drug Business, with Mineral-water Manufactory and extensive country connection and branch shops; equal share in affair about £2,500; object, to add a good wholesale druggists' section. All particulars given and personal interview arranged; references exchanged to genuine client. Apply, "Lincoln" (99/13), Office of this Paper.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 10 words beyond, prepaid.

RETAIL.

JUNIOR; unqualified; 22; tall; outdoors. Owen, 35 Pendre, Cardigan.

BATH (or Near).—22; good experience; outdoors; disengaged. Mills, "Ashton House," Bath.

LADY Dispenser; qualified; Locum; disengaged 2nd. "L., 76 Bedford Road, Ilford, Essex.

LOCUM or Part-time; qualified; abstainer; active; disengaged. "Borax," 535 Holloway Road, N.

JUNIOR; tall; 22; good references; abstainer; outdoors. C/o Owen, Draper, Pontygwaith, Glam.

JUNIOR requires situation; Birmingham district preferred. "G., 94 Regent Street, Snaithwick.

QUALIFIED; aged 26; good all-round experience; London preferred. Andermatt, Stapleford, Notts.

JUNIOR; abstainer; outdoors; first-class experience; home or Continent. Mills, "Ashton House," Bath.

JUNIOR or Improver; 20; tall; good Counter experience. G. Daykin, Market Street, Dalton-in-Furness.

MANAGER; 40; qualified; energetic; Prescriber; Mixed business. Swift, 38 St. John's Road, Lowestoft.

IMPROVER; aged 21; passed Prelim.; 3 years' experience; small salary; outdoors. 94/34, Office of this Paper.

LONDON (North preferred).—Studying; outdoors; abstainer. "Experienced," c/o Mills, Ashton House, Bath.

JUNIOR; 23; good-class business; Photography, Dispensing; disengaged. Harris, 12 Godfrey House, Thrawl Street, E.

QUALIFIED; 30; high-class Dispensing and Retail experience; good references; disengaged. Manning, Fairford, Glos.

ASSISTANT; unqualified; good all-round experience; rapid Dispenser, energetic, reliable. 22 Mayfield Road, Leicester.

UNQUALIFIED; disengaged; experienced, Counter, Dispensing; good references. "V., 3 Eccles Road, Clapham Junction.

MANAGER for Branch, or responsible position abroad. "Minor," c/o C. Watson Martin, Esq., 32 West Derby Road, Liverpool.

PART-TIME; 24; energetic; excellent experience and references; London. Address, "Minor Student" (96/72), Office of this Paper.

IMPROVER; Prelim. passed; 3½ years' experience in good-class business; outdoors preferred. W. A. Brown, Swinside Lodge, Keswick.

ASSISTANT; 30; good all-round experience; Prescriber, Extractor, and Agricultural requirements. "Statim," 5 Union Road, Cowes.

JUNIOR.—Required, situation in good-class business, with Dispensing; 4 years' experience; aged 20; tall. Dixon, Barton Glen, Barton Lane, York.

ASSISTANT or Manager desires permanency; qualified; married; well up in Dispensing and Photography. Jones, "St. Elmo," St. John's Road, Abingdon.

MANAGER or Assistant, married, disengaged; good experience. London and country trade; Photography; excellent references. "Bromo," 145 Vicarage Road, Watford.

MANAGER of one or more large Stores; now holding similar position; reasonable salary required; highest references. Write, "Chemist," 157 Evington Road, Leicester.

JUNIOR; 6 years' all-round experience; Swiss; speaks German, French, and English; 7 months' good London reference. Strittmatter, 175 West-end Lane, West Hampstead.

ASSISTANT; whole or part time (latter preference); outdoors. "Assistant," 128 Fleet Street.

MANAGER or Locum; steady, reliable; married; qualified. Bato, 163 Fosse Road, Leicester.

JUNIOR (21), good references, abstainer, requires situation. Powell, 61 Soho Hill, Birmingham.

LOCUM; qualified; excellent references; disengaged. "Caius," 21A Castletown Road, West Kensington.

JUNIOR. 3 years' experience, wishes change; strict tectotaler; steady, reliable. 96/40, Office of this Paper.

QUALIFIED, middle-aged, as Locum; half-day, day, etc.; varied experience. "G., 9 Wanstead Park Road, Ilford.

EVENING Work.—Dispenser; Chemist or Doctor; best references. McCarthy, 70 Minford Gardens, Shepherd's Bush.

ASSISTANT; disengaged; outdoors; experienced; moderate salary. Browne, 23 Alfred Street, Bow, London, E.

ASSISTANT; West-end and Store experience; outdoors; or Dispenser; town. "H. G., 6 Willow Avenue, Barnes, S.W.

OUTDOOR; unqualified; good references; experienced; disengaged. De Saulles, 11 Whitburn Road, Lewisham, S.E.

EVENING Employment.—Minor Student requires same with Chemist or Doctor. "Velox" (96/93), Office of this Paper.

UNQUALIFIED; 25; good Counterman, Extractor; town or country; tectotaler. "A. A." (96/39), Office of this Paper.

DISENGAGED; Manager; unqualified; permanency; Locum or part-time. "Extractor," 456 Camden Road, Holloway, London.

BRANCH Manager or outdoor Assistant; 34; experienced; Prescriber, Extractor. Thomas, 7 Belle Vue Terrace, Aberayron.

ASSISTANT; competent; varied experience; good references; disengaged. Fawcett, "Blencogo," Dinarth Road, Colwyn Bay.

UNQUALIFIED; 23; 5 ft. 11 in.; 2½ years present situation; well recommended. Alabone, Danbury, Connaught Road, Sittingbourne.

QUALIFIED; Manager, Assistant, or Locum; Extractor; all-round experience; moderate salary. "Statim," 162 Regent's Park Road, N.W.

LOCUM or Branch Manager; qualified; disengaged; experienced in good General and Dispensing business. S. V. Holgate, 2 Peveril Drive, Nottingham.

UNQUALIFIED Manager or Assistant; 35; married; tall; Store and Dispensing experience; disengaged. "V., Heath Cottage, Crawley Down, Sussex.

IMPROVER; disengaged; Dispensing, Prescribing, Extract, and Photographic; good references. "Phenacetin," 9 Otley Road, Custom House, London, E.C.

QUALIFIED (29), 13 years' good all-round experience and references, seeks good position as Manager or Senior. "Chemist," 35 Parish Lane, Penge, London.

MANAGER or Assistant; good Counter, Dispensing, and Photographic; abstainer; unqualified; capable Locum; disengaged. "B., 18 Sainfoin Road, Balham, S.W.

UNQUALIFIED; disengaged; 22; 6 years' experience; good Dispenser; highest references; large town preferred. Moore, c/o Miss Oddy, Heather Bank, Yeadon, Leeds.

NOW at Liberty.—Qualified Manager; 29; single; abstainer; Photographic, Prescriber; good all-round experience; highest references. "Chemist," 272 Waterloo Road, Burslem.

ASSISTANT (29) desires berth with Surgeon's house; good-class Dispensing and thorough knowledge of Surgical Instruments. "Radix," 83a Queen's Road, Everton, Liverpool.

SITUATIONS WANTED *(continued).*

QUALIFIED; 29; Dispensing; disengaged. "Durley," Seymour Road, Hampton Hill.

JUNIOR; 22; good references; time for study; disengaged. 98/29, Office of this Paper.

AS Manager; good-class, all-round experience; qualified. "H.," 23 Elms Avenue, Eastbourne.

H. J. WALKER, Pharmacist, Spalding, now disengaged for temporary or permanent management.

JUNIOR; 20; good Dispensing experience. H. Freedland, 23 Heywood Street, Cheetham, Manchester.

RELIEF Duty; one day or half-day a week and occasional Sunday evenings. 99/8, Office of this Paper.

UNQUALIFIED; 34; disengaged; good references; 35s.; single. "Velox," 32 Trinity Road, Wandsworth, S.W.

QUALIFIED; F.S.M.C.; 25; outdoors; London or suburbs. Marshall, 75 Priory Park Road, Kilburn, N.W.

JUNIOR; 21; 4½ years' good all-round experience; abstainer; disengaged. Hancock, 8 Mount Gold Road, Plymouth.

MANAGER; qualified; middle-aged; no family; good reference and Prescriber. "J.," St. John's Road, East Ham.

JUNIOR; 20; disengaged; general experience; good references; indoors or outdoors. Wood, 151 Market Street, Hyde.

BRIGHTON.—Locum; qualified; one or two evenings; recommended. "Abstainer" (99/30), Office of this Paper.

MANAGER; qualified; London or near; temporary or permanent; sound experience; moderate salary. "L. G.," 5 Norfolk Road, W.

AS Assistant or Manager small branch; Dispenser, Prescriber, Extractor; reliable. "Competent," 55 Fore Street, Redruth, Cornwall.

ASSISTANT; 26; well recommended; London experience; disengaged; all-round man. "Salol," Exeelsior House, High Street, Brightlingsea, Essex.

FRANCIS & CO., Chemists, Wrexham, can confidently recommend Apprentice just out of his time; tall; good Counterman and Window-dresser; Photography; disengaged.

WANTED, situation as Manager or Manager and Traveller; country district preferred; aged 36; over 12 years present appointment. Apply, 99/34, Office of this Paper.

ASSISTANT; 24; unqualified; 9 years' all-round experience; Sight-testing; tall; good Counterman; energetic and cheerful worker; undeniable references. 62 Mortlake Road, Hford.

CHEMIST, Minor, M.P.S., 28, desires change; well up all-round; first-class modern experience; Dispensing, Counter; Photo; Manager or Assistant. 98/30, Office of this Paper.

ASSISTANT; 26; unqualified; London and provincial Store experience and management; excellent references; Midlands preferred. Bradbury, Midland Cottages, Barnet Green.

MANCHESTER District.—Junior; 20; tall; 5 years' experience; outdoors; good high-class references; Dispensing, Counter, and Photography. Meadows, c/o Dickson, Chemist, Clayton.

ASSISTANT; 23; unqualified; 5 ft. 9 in.; 7 years' experience in good-class Retail and Dispensing, town and country; disengaged; outdoors; Midlands preferred. 98/31, Office of this Paper.

ASSISTANT; 26; high-class Dispensing and General experience, London and provincial; disengaged now. For references and particulars address, "C.," The Central Pharmacy, Weston-super-Mare.

ASSISTANT; satisfactory credentials; 5 years present situation. "S.," 115 Stephenson Street, North Shields.

MANAGER; qualified; 36; Photography; excellent references. "Beta," 10 Cecil Terrace, Wyndeliff Road, Charlton, S.E.

DISPENSER to Doctor and Bookkeeper; excellent references; disengaged; London. "S. S.," 175 Kennington Road, S.E.

QUALIFIED (25), disengaged, desires permanency; used to good-class trade; reliable and energetic; excellent references; knowledge of French. "Nightingale," 26 Vauxhall, Jersey.

EXPERIENCED Assistant; unqualified; capable of management; 5 years last position; life abstainer; highest references; disengaged. "M.," c/o Morris, 6 Priory Pavement, Hornsey, N.

UNQUALIFIED; 25; excellent all-round experience; Photography; active, thoroughly trustworthy; excellent references and testimonials; outdoors; London. "Aggregator" (96/27), Office of this Paper.

SENIOR or Manager; qualified; good Dispenser, Prescriber, and Salesman; exceptional Photographic knowledge; experienced; reliable; disengaged; excellent references. Howard, 1 Park Terrace, Cambridge.

ASSISTANT; unqualified; Chemist or Doctor; married; good Dispenser; excellent references; permanency preferred; any district; moderate; immediately; L.P.S.I. 2 Railway Terrace, Abingdon, Berks.

MANAGER; middle aged and active; town or country; exceptional experience; business with scope for increase and improvement entertained on mutual conditions. "M.P.S." (98/33), Office of this Paper.

POSITION as Manager, Buyer, etc., by trustworthy, up-to-date and energetic Pharmacist; 38; London and provincial experience, on modern cash lines; undeniable references and recommendations; life-long abstainer; security. "Lotem," E. S. Peck, Ph.C., Cambridge.

ASSISTANT; competent and energetic; 16 years' good experience (English, Irish, City, and provincial); Hall qualification; good Dispenser, Prescriber, and Counterman; highest references; temporary or permanency. "H. E. G.," 9 Hathaway Road, West Croydon.

SENIOR or Manager; qualified; 24; tall; gentlemanly appearance and address; excellent all-round experience, London and provincial; thoroughly trustworthy and obliging; good Counterman and Dispenser; South England preferred; disengaged. S. Robinson, 85 Nodhill, Newport, I. of W.

FREE COPIES OF THIS SUPPLEMENT

are mailed every week to hundreds of inquirers, and delivered to them on Friday by the same post as "The Chemist and Druggist." They are thus enabled to reply very promptly to any advertisement which suits their needs. All that is necessary to secure the Supplement in this manner is to send a supply of stamped and addressed wrappers or envelopes to **The Publisher** of "The Chemist and Druggist," 42 Cannon Street, London, E.C., when a Supplement will be mailed every week for delivery in any part of the country, as stated above. Inquirers thus save the trouble of weekly application, and are sure of getting what they want, because "The Chemist and Druggist" Supplement is not only the approved medium for advertisements of this character, but has the largest circulation and gives the best results.

The Supplement may also be obtained on personal application at or after 9 a.m. on Friday Mornings at 42 CANNON STREET, LONDON, E.C.

JUNIOR (23) desires Part-time berth in London. Smith, 29 Nelson Square, S.E.

ASSISTANT; 22; City and West-end experience. "W." 168 Clarendon Road, W.

LOCUM or Manager; qualified; disengaged; good references. 1 Byue Road, Sydenham.

IMPROVER; tall; business-like; passed Prelim., small salary. "C." 49, Goldhawk Road, W.

OUTDOORS; disengaged; London experience; Dispensing or Retail. 129 Russell Avenue, Wood Green.

ASSISTANT; 24; Dispensing, Counter; outdoors; disengaged. "Student," 84 Astonville Street, Southfields.

DISPENSING or Counter; 35; Minor; good experience, London; outdoors preferred. Page, 76 Beckton Road, E.

BRANCH Manager; qualified; single; Photography; country preferred; disengaged. S., 372 London Road, Thornton Heath.

EXPERIENCED Locum disengaged; day or week; town or country; highest references. Briggs, 100 Boston Road, Hanwell.

ASSISTANT; tall; aged 28; West-end and suburban experience; good references; unqualified; outdoors. "Statin," 68 Dagnan Road, Balham.

MANAGER; disengaged; medium class; energetic; capable Extractor; good experience. "Meta," 82 Robert Street, Regent's Park, N.W.

SENIOR Assistant; 27; unqualified; high-class London experience; excellent Dispenser; best references. "Codex" (103/11), Office of this Paper.

AS Manager or First Assistant; good all-round experience; 5 ft. 10½ in.; aged 35; good references. "B.," 28 Downhills Park Road, Tottenham.

MANAGER or Senior, or with view to succession; qualified; 33; single; London and provincial experience; Photography; disengaged. "F. P.," 65 Castle Street, Luton.

UNQUALIFIED (25); good experience in City, West End, and Provinces; good salesman and manager; excellent references. "S. W. B.," 8 Belsize Park Terrace, Hampstead, N.W.

AS Manager or Senior; now disengaged; undeniable references; good experience in Dispensing; smart Counterman and able to Extract. "Linsced," 47 Arlingford Road, Brixton, S.W.

DISPENSER or single-handed Assistant; 30; tall; thoroughly experienced and competent in Chemist's and Surgery; Locum entertained. "Chemist," 26 Canonbury Square, London, N.

ASSISTANT (35), unqualified, married, good Dispenser, Counterman, Extractor, Photography, desires permanency; satisfactory references. Little, 2 Moorland Place, Low Moor, near Bradford

UNQUALIFIED; 28; abstainer; 14 years in present situation; experience in Retail and Wholesale; also Veterinary and Dispatch department; quick Counter; outdoors; accurate. 102/14, Office of this Paper.

MANAGER or responsible position; qualified; aged 40; outdoors preferred; excellent experience and references; good appearance and address; disengaged; height 5 ft. 10 in.; as Locum entertained. Longman, 81 Claude Road, Cardiff.

SENIOR Assistant; first-class City and West-end experience; very reliable and quick Dispenser, pleasing Salesman; excellent references; temporary or part-time engagements considered; now disengaged. "Photo," 3 Norman Road, St. Leonards-on-Sea.

WHOLESALE.

SITUATION required; 10 years' Retail and Wholesale experience, aged 30. 98/5, Office of this Paper.

DRUGGIST'S Sundry Warehouseman 25; 9 years' experience. Heal, 13 Pakeman Street, Holloway, N.

TRAVELLER wants Situation or good Agency: Retail and Wholesale experience. 98/21, Office of this Paper.

TRAVELLER: Drugs or Sundries; good connection Yorkshire and Eastern Counties. "Reliable," Hoblyn, Twickenham.

TRAVELLER; 36; sound connection; 10 years with present firm; excellent references. Good, 4 Markham Square, London, S.W.

TRAVELLER; 38; energetic, up-to-date; sound connection Midlands; Wholesale with Retail experience. "Rad" (102/19), Office of this Paper.

TOILETS, Packed Goods; open up or manage; thorough trade knowledge; good certificates; ten years' successful experience. "S. A." (97/38), Office of this Paper.

TRAVELLER: some experience; good address; small salary; economical in expenses; knows Wholesale well; disengaged; good reference. "Reaper" (102/25), Office of this Paper.

14 years' experience, Wholesale and Retail, all departments; can take charge or travel; married; well recommended. "Beverley," Church Road, Penn Fields, Wolverhampton.

CHEMIST, qualified (medallist), experienced all branches of Pharmaceutical Manufacture, Analyst, good disciplinarian, abstainer, desires position as Laboratory Manager; excellent references. Reply, 94/31, Office of this Paper.

ADVERTISER (25) desires to obtain better position; London preferred; well accustomed to Manufacturing Galenicals, keeping stock, controlling, etc.; any department; excellent references, disengaged shortly. 97/13, Office of this Paper.

YOUNG gentleman, energetic and trustworthy, desires position with Wholesale house; first-class London and provincial experience; tall; good address; excellent references as to character and ability. "Codex" (29/16), Office of this Paper.

REPRESENTATIVE, with sound connection, desires to represent good firm on commission and part expenses, Drugs, etc., in South Wales, Monmouthshire, Herefordshire, Gloucestershire, Worcestershire, Warwickshire, Staffordshire, and Shropshire. 29/9, Office of this Paper.

INDIA, Far East, or Colonies.—Wanted, situation as Representative; aged 28; single; up-to-date knowledge of Drugs, Photography, acquainted with Surgical Instruments; last 4 years Colonial experience, Wholesale, Retail, Hospital; Hindustani spoken; excellent credentials from leading firms, medical men; permanency required. 94/40, Office of this Paper.

TO BUYERS AND SELLERS.

We take every care to ensure that proprietary and other goods advertised in this column are genuine surplus stock of reputable persons in business, and are compelled to refuse advertisements sent by those who, when occasion requires, decline to satisfy reasonable inquiries as to their *bona-fides*.

We again call the attention of those who use this column for the sale or purchase of goods to the desirability of using our Deposit System. Some forward goods before they receive money for them, and others forward money to advertisers before they have even seen the goods. Disappointment in such circumstances is bound to happen now and then, and it is to prevent this, as well as to check fraud, that our Deposit System was instituted.

The buyer sends us the money for the goods, and when we hear from him that they are satisfactory, and not till then, we hand over the money to the seller. A commission of 2d. is charged by us on any transaction of 3l. or less, and 1s. if above that amount. The commission is payable by the buyer, and should be included in the money sent to us. All Cheques and Postal Orders should be made payable to "Edward Halse," and crossed "Martin's Bank, Ltd."

Coming Events.

Notices for insertion under this heading should be received by the Editor on Wednesday of each week.

Monday, January 4.

Society of Chemical Industry, London Section, Burlington House, Piccadilly, W., at 8 P.M. Messrs. B. F. Howard and O. Chick on "Cinchonamine and Certain Other Rare Alkaloids." Messrs. W. P. Dreaper and A. Wilson on "Reactions Between Dyes and Fibres." Drs. S. B. Schryver and R. Lessing on "A Physico-chemical Method for Comparing the Antiseptic Value of Disinfectants."

Tuesday, January 5.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, London, W., at 3 P.M. Professor W. Stirling on "The Wheel of Life" (Lecture IV.).

Oldham Pharmaceutical Association, Oriental Restaurant, Church Terrace, at 7.30 P.M. Smoking-concert.

Wednesday, January 6.

Pharmaceutical Society of Great Britain, 16 Bloomsbury Square, London, W.C., at 11 A.M. Council-meeting.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin, at 3 P.M. Council-meeting.

Thursday, January 7.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, London, W., at 3 P.M. Professor W. Stirling on "The Wheel of Life" (Lecture V.).

Bradford Chemists' Association, Royal Hotel, Darley Street, at 9 P.M. Address by Mr. Hanson.

Birkenhead and Wirral Chemists' Association, Avondale Café, Church Street, Liverpool. Whist-drive. Tickets from Mr. A. H. Ellithorpe, 33 Devonshire Road, Birkenhead.

Great Yarmouth Pharmaceutical Association, 156 King Street, at 8 P.M. Monthly meeting.

Chemists' Assistants' Association, 73 Newmarket Street, London, W., at 8.30 P.M. Musical and social evening.

Saturday, January 9.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, London, W., at 3 P.M. Professor W. Stirling on "The Wheel of Life" (Lecture VI.).

ASSOCIATION OF WOMAN PHARMACISTS.—A meeting is to be held at Gordon Hall, Gordon Square, London, W.C., on January 14, at 8 P.M., when Miss J. Mitchell will read a paper on the annual meeting of the National Council of Women of Great Britain and Ireland at Aberdeen. Mrs. Freke will report on a meeting of the Joint Committee (an outcome of the Workers' Educational Association) on "Oxford and the Education of Workpeople."

College Notes.

MANCHESTER COLLEGE OF PHARMACY.—The students held their annual soirée at the Gaelic Club, Oxford Road, on December 23. Both past and present students contributed to the ample programme, which included an amusing sketch—"Family Jars," with seven characters. All the items were favourably received. Dancing, musical games, and whist varied the programme during another successful gathering.

GLASGOW SCHOOL OF PHARMACY.—The Principal (Mr. John Lothian) entertained the students with a gramophone concert in the lecture-room on Christmas eve. After partaking of refreshments, Mr. Lothian gave selections on his powerful gramophone, including selections from Kubelik, Tetrassini, Radford, Lauder, Turner, etc. A hearty vote of thanks to Mr. and Mrs. Lothian and Mr. Peter Fenton, who had made the arrangements for the entertainment, terminated an enjoyable evening.

Mr. T. W. ATTENBOROUGH, demonstrator at the South of England College of Pharmacy, entertained about fifty of his friends to dinner at the Horns, Kennington, on December 22, the day before his marriage to Miss Hazart, a former student of the College. Among those present were Messrs. H. Lucas, R. Dudley Craig, J. M. Reis, F. Crossley-Holland, and M. Hazart. After an excellent dinner and the loyal toast, Mr. R. Dudley Craig gave the toast of "The Host." Mr. J. Stanley White then, on behalf of the past and present students, presented a handsome marble clock and framed address to Mr. Attenborough, who expressed his thanks at great length. Next the toast of "The Lady" was enthusiastically received, and a short but very interesting enter-

tainment of song and sketch was provided by Mr. Sadler, who was assisted by Messrs. Reis, White, Moss, Moffatt, and Crossley-Holland. "Auld Lang Syne" and "Good Wishes" for the host ended the evening.

Where to Study.

The following educational institutions are advertising in this issue:

London College of Pharmacy, 323 Clapham Road, London, S.W.

Muter's (South London) School of Pharmacy, 325 Kennington Road, London, S.E.

Highbury New Park College, Highbury, London, N.

Liverpool School of Pharmacy, 18 Colquitt Street, Liverpool.

North of England School of Pharmacy, 55 Northumberland Street, Newcastle-on-Tyne.

Bath and West of England College of Pharmacy, Cleveland Place, Bath.

City of London College, White Street and Ropemaker Street, Moorfields, London, E.C.

Agricultural Notes.

Lime-sulphur Wash as a Fungicide.

The United States Department of Agriculture calls attention to some experimental trials of a lime-sulphur wash for the prevention of fungus diseases, the results of which are regarded as very encouraging, though the wash has not yet been sufficiently tested to enable it to be definitely recommended. This wash has been in use against San Jose Scale and other insects of that type, but it has now given satisfactory results against several fungus diseases of the apple and peach, and it is likely to prove of special value in regard to the latter plant, as there is practically no known fungicide which can be used on peach-foliage without risk of injurious results. The mixture is composed of 10 lb. of flowers of sulphur and 15 lb. of fresh stone lime to 50 gallons of water. The lime should be put in a 50-gallon tub and two to three gallons of boiling water poured over it; the sulphur should be immediately added, and another pail of hot water. The heat from the slaking lime will cause the mixture to boil for several minutes violently. Some stirring is necessary, and more water should be added if it gets too thick to stir. A piece of saeking may be thrown over the tub to keep in the heat. The boiling will continue for twenty to thirty minutes, and when it ceases cold water should be added to make up the mixture to 50 gallons, the whole being thoroughly stirred and then strained through a sieve. All the sulphur should be carefully worked through the meshes. This wash gave very satisfactory results against brown rot of the peach, peach-scab, and bitter rot of apple without injuring the foliage, and it also appeared to prevent some other diseases. It is also suggested that it would at the same time have considerable value as an insecticide, and that it could be used to replace Bordeaux mixture as a preventive of apple-scab where injury to the fruit or foliage was to be feared.

Fungicidal and Insecticidal Spraying.

Spraying as a cure for attacks of fungi and insects was one of the subjects of discussion at the recent Conference of British Fruit Growers, held in the Royal Horticultural Society's Hall at Westminster. Mr. Massee devoted his paper to a consideration of spraying as a remedy for fungal diseases. He observed that the majority of persons expected too much from the treatment. Spraying would not cover the whole plant, and if the fungus was not touched the spraying was no good, while some fungi would grow and germinate even through a covering of mixture. Theoretically, spraying would serve for prevention, but in practice this was not always true. Neglect of pruning was responsible for much fungal infection. Professor Theobald dealt with the effects of spraying as insecticides. He declared that growers were spending too much on the process. Infected trees only should be treated, no wash would act as a preventative, though quassia and nicotine might possibly ward off aphids for a time. He suggested the time for spraying in the spring when the insects were just emerging from their eggs, and recommended the following washes: For mussel scale, caustic alkali; for apple sucker, salt and lime; for the pear-leaf blister mite, the lime, salt, and sulphur wash; for caterpillars, an arsenical wash. Tobacco and quassia washes, made with soft soap, were also of great value; but it must be understood that the idea that any one wash would destroy all creatures was a mere delusion.

NETTLE SOUP made from the roots and stalks of the plant, with half-developed leaves, collected in the spring, is a Swedish remedy for anemia.

Minor Experiences.

E. T. (252/56) give his impressions at the Edinburgh Minor examination, after taking it at the first attempt. Receiving the notice to attend the practical portion of the examination on July 2, with the exception of reading over my "practical" notes, I ceased all work, he says, and consequently turned up on the eventful morning feeling more fit than many of my fellow candidates.

Pharmacy was the first subject, under Mr. Boa, who handed me a paper containing the following prescriptions:

Make $\frac{1}{2}$ B.P. qty. ammoniacum mixture.

Make $\frac{1}{2}$ B.P. qty. syrup of tolu.

Bismuth. carb. ...	...	...	gr. x.
Magnesia levis ...	...	...	gr. xij.
Liquor. morph. hyd. ...	...	...	m v.
Spt. chloroformi ...	...	...	m xij.
Aq. cinnamomi ad ...	...	...	℥ss.

Misc. Ft. mist. Mitte uncias sex.

Sig.: ℥ss. ter in die p.c.

Pulv. nucis vom. ...	...	...	gr. ss.
Pulv. ipecacuanhae ...	...	...	gr. j.
Ext. euonymi sic. ...	...	...	gr. ss.

Misce. Ft. pil. ij. Mitte viij.

Sig.: One after each meal.

Myrrh. ...	...	...	gr. xx.
Benzoini ...	...	...	gr. xv.
Aq. menth. pip. ...	...	...	℥ij.
Glycerin. ...	...	...	℥ss.

M. -Ft. collutorium.

Sig.: N.-P.

Mr. Boa, though carefully supervising my work, never harassed me, as I had been led to believe he would do. The work was finished close on time, the syrup of tolu occupying the major portion of the allotted period.

PRACTICAL CHEMISTRY.—Mr. Tocher gave me a solution of K_2CO_3 to determine grams in grams. I used litmus as indicator in boiling solution, and titrated with oxalic acid—the whole operation, with four weighings, occupying an hour and a half. On checking my report I found that the equivalent of Na_2CO_3 had been used for K_2CO_3 . This necessitated fresh calculations, and left an hour or less to analyse the solution provided. The latter consisted of $Al_2(SO_4)_3$ and KBr .

PHARMACY was the first subject on the second day, with Mr. Boa. After a few questions on the poisons law, he asked me the principles of the percolation process. Why subject the drug to a preliminary maceration with the menstruum? Then the preparation of menthol. Strength of tinct. opii ammon. I answered, "0.06 gram of anhydrous morphine in 5j." He asked me if I did not consider a knowledge of 5 grains of opium to 5j. of more practical use. Any other tincture resembling this? (Tinct. camph. co.) Difference? How was ext. glyce. liq. prepared? Why evaporate to sp. gr. 1.200? An attempt at standardisation.

MATERIA MEDICA, with Mr. Merson, came next. A piece of fresh orange-peel was the first sample shown, with a question as to how many varieties. It was some time before I hit upon "sweet" and "bitter." Following fresh specimens of horseradish-root and belladonna-leaves were shown. What is the cause of pungency in the former when scraped? Does it pre-exist in the root? What is a glucoside? Mention an official one. What is always formed by the action of an enzyme upon it? Define an alkaloid. Simple difference between ethereal and fixed oils? How many varieties of the latter? Boiled oil: reason for treating with litharge? On referring to the oxidation of the linolein to linoxyn, I was quickly cut short. Digitalis (when collected?), belladonna, hyoscyamus, and aconite leaves were the last of the materia medica specimens shown.

BOTANY.—Professor Traill took me in charge. The section on the slide provided for examination consisted of a T.S. vascular cryptogam, with concentric bundles. I made a sketch, naming the parts. He did not take me on internal structure, saying that apparently I knew all about it. Next I was asked to point out the characteristics of each of the fruits on the table. Then the examiner pointed to a plant with root-tubers. "How do you know they are not stem-tubers? What is their function? Cut a section and tell what reserve food-material they contain." I said it was not starch, but may be inulin, characteristic of the *Compositae*. Would I see it under the microscope? No. How would it be demonstrated? By means of alcohol.

PRESCRIPTION-READING.—Mr. Fraser handed me an English prescription to write out in full Latin; then followed the reading of some badly written prescriptions and a few questions on doses.

CHEMISTRY, with Dr. Dobbin, was my last subject, but had no terrors for me, as during my apprenticeship I had taken the South Kensington examinations. The first question was, "How do you prepare pot. ferrocyanide?" I mentioned the "spent oxide" of the gasworks as being the chief source; but he also inquired how it was originally prepared, with the

different steps of the reaction. How could pot. ferrieyanide be prepared from the ferrocyanide? (By oxidation with chlorine.) Write down the formulæ and say whether you strictly regard it as an oxidation-process? (I explained that the raising of valency could be regarded indirectly as oxidation.) What is formed when pot. ferrocyanide is heated? Also on heating pot. bichromate? How is potass. permang. prepared commercially? What occurs on heating same? How is the manganate obtained? Write down formulæ for both these salts. What occurs when ammonium acetate is heated? And on heating acetamide? On hydrolysing the methyl cyanide eventually obtained. What is formed on dehydrogenating methyl cyanide? State changes in colour observed on heating Ag_2CO_3 and $CuSO_4$.

Heard in the Smoke-room.

He was a large man, with a loud voice and a piercing Yorkshire accent. He looked like a portrait of Gambetta; but he dealt in electric lamps. A new lamp of marvellous power was his main topic, and he confided details of its construction in a loud whisper which annoyed the scribbling ambassadors of commerce in the commercial room adjoining.

His confidant was a meek-looking, little man with grey whiskers, who might have been the confidential secretary of a big buying concern of local repute. At any rate, the big man's manner awed him; he agreed nervously with every assertion made by the electrical expert, and he glanced around at us furtively when the whisper became unusually insistent.

I was trying to read "Pippa Passes," but Ottima and Sebald became inextricably mixed up with "filaments," "candle-power," and "currents," and by the time Pippa began her oft-quoted

"The year's at the spring
And day's at the morn,"

I had to give it up in despair.

The red-haired representative of a soft-goods house, who was studying Herbert Spencer's "Sociology" in the corner chair opposite, took his feet down from the other chair on which they were resting, swore in a low voice, glared murderously, and went out to the "Empire" next door. But Gambetta continued placidly in a raucous whisper, and the little secretary murmured, "Yes, yes!" and shrank smaller and smaller.

The door opened, the Boots said, "Somebody to see you, Mister 'Olland," and a loud "Hullo, lad!" introduced a patriarchal man wearing a soft-felt hat. He also was a Yorkshireman, and he was slightly deaf. This was the climax. The Voice of Gambetta had to be raised so that his new friend might hear. Consequently the whole hotel reverberated with sound. The house was promptly deserted by all save the trio and myself. I remained because the first few words between the newcomer and the Man with the Voice revealed the fact that a chemist had completed the trio—not only a chemist, but a prescribing chemist.

"I was just sayin'," began Gambetta, "that my legs 'ad been troublin' me agin. My friend 'ere, 'e's just t' saim; pains all ower 'im, when he wakes oop i' t' mornin'. What d'ye think o' neat's-foot oil, Mister 'Awarth? Neat's-foot oil or olive oil? 'The legs wants feedin',' says I, 'and the muscles want feedin'. What d'ye think?"

"Ay," began the Esculapius sagely, "mebbe they do; mebbe they do! But ye can't get good neat's-foot oil many places nowadays."

"Just what I was sayin', lad; nobbut the tripe-dresser can gie ye it power," replied Gambetta in triumph.

"Go to some o' them chemists," went on the Sage One, "an' what d'ye get for neat's-foot oil? A pint o' cottonseed oil an' forty minims o' sulphuric acid; that's what ye get! But try a good tripe-dresser, an' ye may get it power."

So it was decided that the treatment was to be neat's-foot oil from the tripe-dresser for external use, and Mr. 'Awarth was commissioned to "get summat up" for each of the patients to "knock the mineral oot o' their systems."

Then the talk drifted to indigestion, and the efficacy of hard-boiled eggs as a cure. The chemist told his friend of a book he had recently acquired which contained a recipe for that phase of indigestion when "nowt lies on yer stummick." The cure was "nobbut more nor less nor 'ard-boiled eggs." The book was 200 years old, and the hard-boiled egg cure had been proved reliable by experience. This brought on the irrepressible Gambetta once more.

"I've always said," he bawled, "that 'ard-boiled eggs are much easier digested than light-boiled. An' why? Because, of course, ye get rid of all the alumina!"

The prescriber winced a little at this, but he was too polite to correct his friend. Moreover, it would have been useless. "Ay," he said, "and you get more carbon when they're hard-boiled."

"True," agreed Gambetta, "but the main thing is ye get rid of the alumina."

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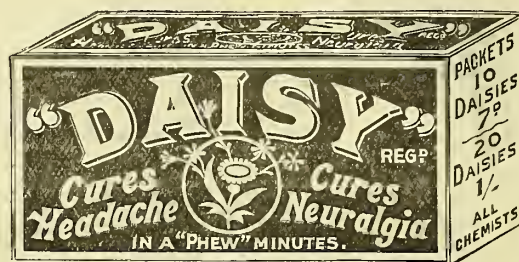
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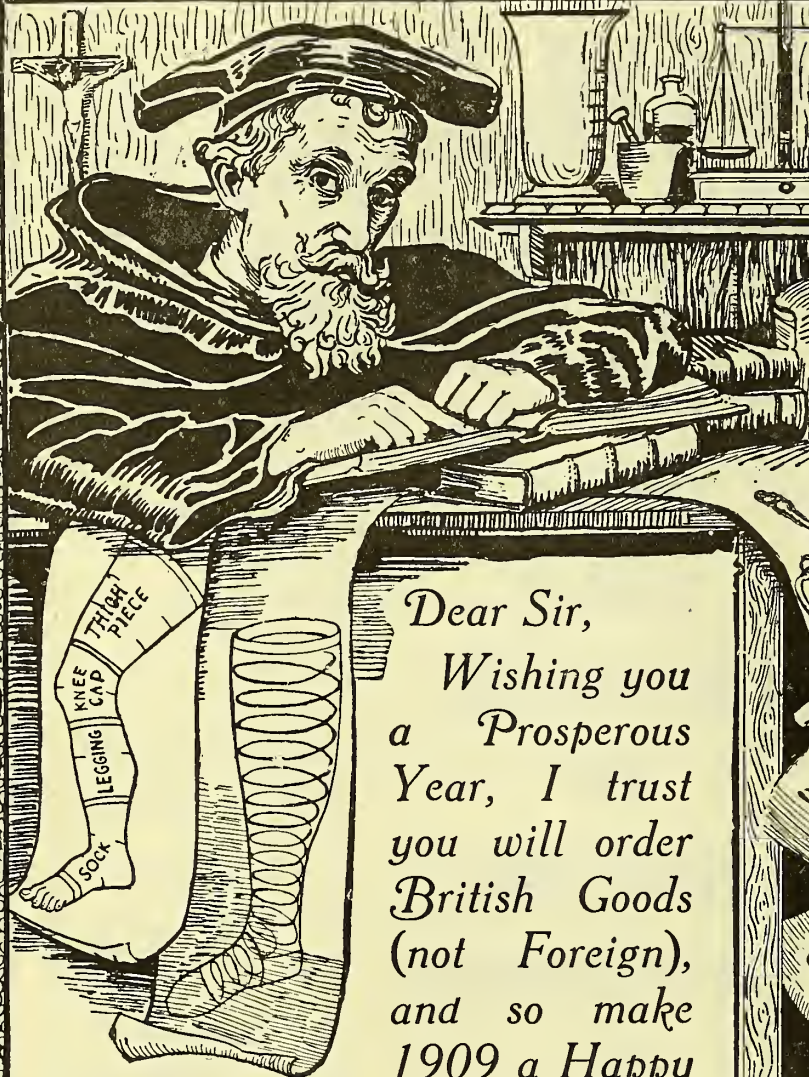
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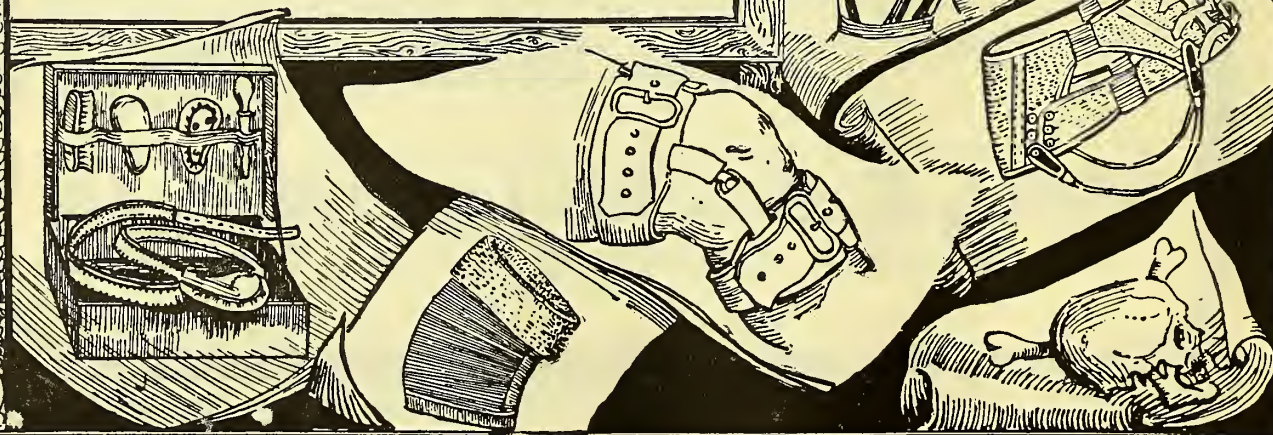
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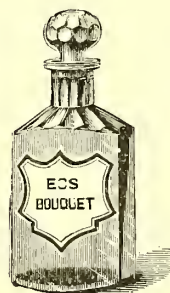
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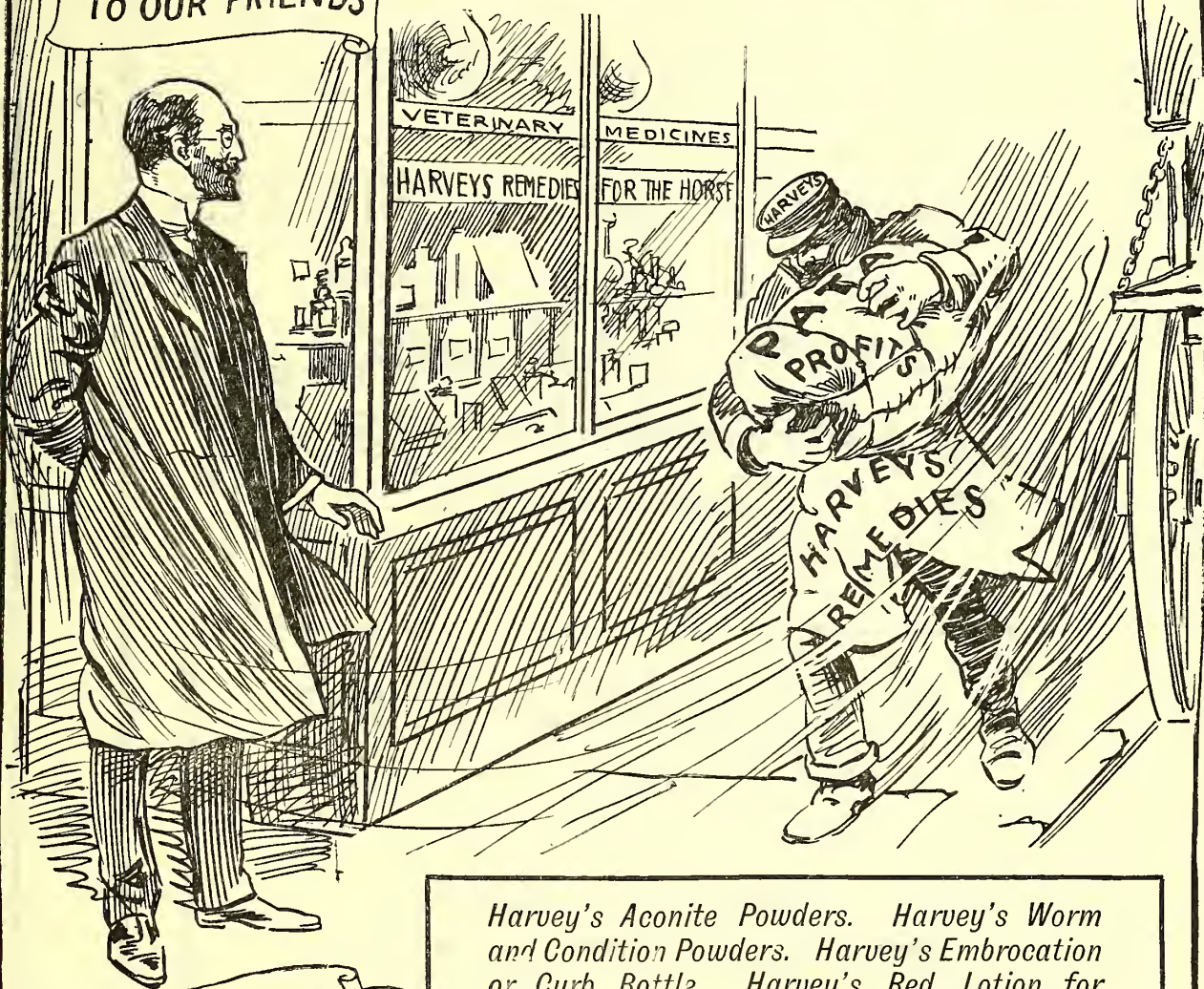
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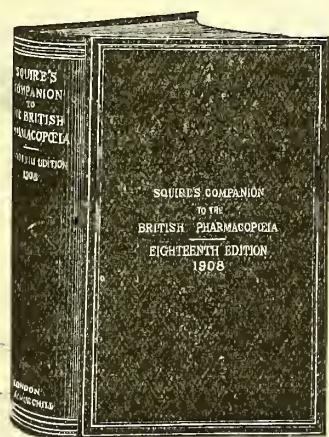
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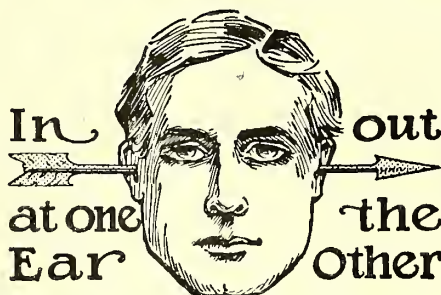
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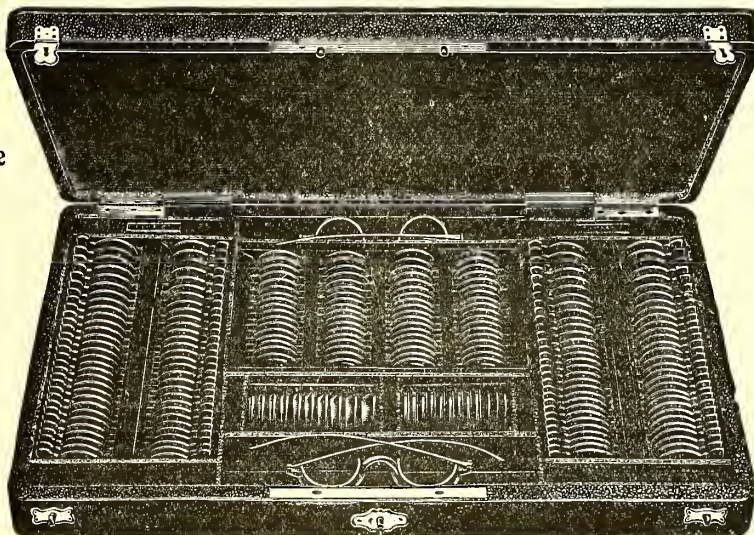
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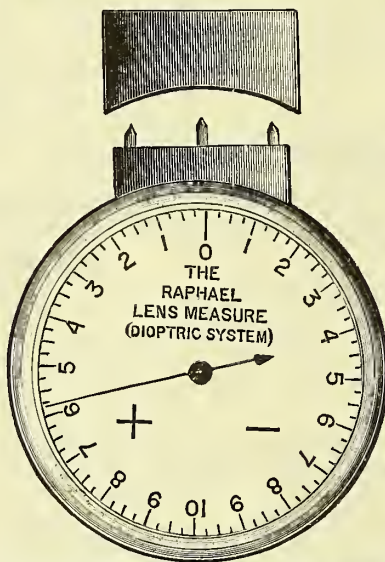
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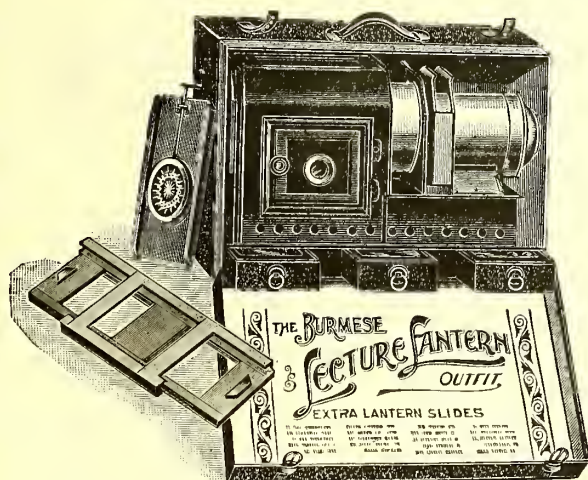
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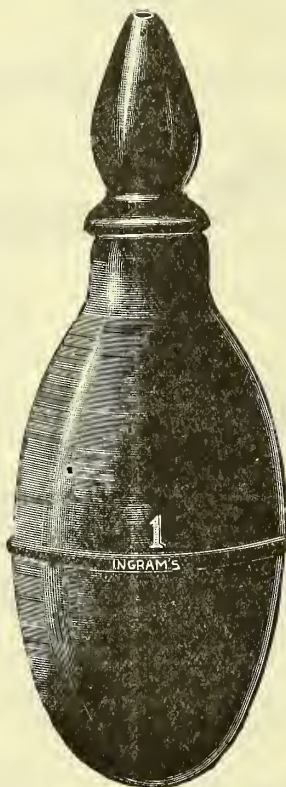
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BEGIN THE YEAR WELL.

THAT is the first step towards making a satisfactory balance-sheet at the end of the year: so let all in the chemical and drug trades and British pharmacy know what you have to sell. Advertise in the Winter Issue of THE CHEMIST AND DRUGGIST, to be published on Saturday, January 30. We are now booking orders for the insertion of booklets, circulars, and price-lists in the Winter Issue as insets. Write to the Publisher, THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C., for full particulars.

DIARY POSTCARD COMPETITION.

EVERY copy of the *C. & D. Diary*, 1909, sent out contains two postcard coupons, which should be filled in and posted to the Editor of the *C. & D.* not later than January 14. Ten guineas will be awarded as prizes to those who win them according to the conditions on the coupons.

Summary.

The subjoined paragraphs give the gist of the more important matters in this issue, with the object of showing at a glance what has happened during the week. See also "Contents" in the first column.

THIS is the first number of the seventy-fourth volume of the *C. & D.*

THE PRESCRIPTION PROBLEM given this week looks very simple. It is on p. 36.

BELGIAN PHARMACIES want their French *confrères* to mark prescriptions as they do (p. 5).

SANSEVIERA THYRSIFLORA is the subject of Mr. G. E. Oliver's new article on South African plants (p. 21).

A FEDERAL BOARD OF PHARMACY is suggested for Australia. Mr. A. B. Chater outlines its constitution on p. 7.

THE KING now has a bacteriologist—Dr. H. R. D. Spitta. It is a new part in his Majesty's establishment (p. 2).

AN ALARMING FIRE at Messrs. Southall Brothers & Barclay's premises on December 27 has not interrupted their business (p. 3).

TASMANIA has passed a new Pharmacy Bill in a record minimum period. It institutes a Pharmacy Board for the State (p. 7).

PROPRIETARY PRESCRIPTION SPECIALITIES which are popular in the United States are named on p. 9. Some have still to come across the water.

COPAL, so treated as to resemble amber, has been sold for the latter. The seller has been fined under the Merchandise Marks Acts (p. 10).

BUSINESS-BUILDING is "Xrayser's" subject this week. His observations and reflections are upon Mr. Russell's article in the *C. & D. Diary* (p. 15).

WE CONCISELY REVIEW the leading features and movements in the chemical and drug markets during the past year, which commercially has been poor (p. 27).

PROPRIETARY MEDICINES have frequently made fortunes, and more often lost them. Mr. Thomas Russell begins a series of articles on how to extend a proprietary (p. 21).

A CERTIFICATE entitling persons to practise as pharmaceutical chemists in any part of the British Empire is the Queensland Pharmacy Board's New Year's card (p. 17).

THE SICILIAN EARTHQUAKE has disorganised business in produce coming from that island and Calabria, these including lemon and bergamot oils, citric acid, etc. (p. 18).

THE BOARD OF INLAND REVENUE have acceded to our request that Pagenstecher's Ointment and "Pagenstecher's Eyo-ointment" should not be regarded as involving a claim to proprietary right (p. 19).

MORE PROBLEMS arising from the Poisons and Pharmacy Act are put by subscribers, and we reply to them on pp. 35 and 36. They are points which may arise in the experience of any retail chemist.

A GNAT LINIMENT containing muscarine has been found by a Liverpool coroner's jury to have caused the death of a gentleman, who took neuritis following its application last September (p. 13). The origin and chemical and physiological properties of the alkaloid are noted on p. 20.

THE HOLIDAYS and stocktaking operations have reduced business in chemicals and drugs to a minimum. The chief alterations include an advance in lemon and bergamot oils and citric acid. Silver nitrate, petroleum, ergot, and West Indian tamarinds are also higher. Shellac and crude camphor are easier (p. 31).

WHAT ABOUT DRUG-STORES? asks Jay Mack with reference to the Poisons and Pharmacy Act. He suggests that when the Minor examination is divided the first part should carry with it a certificate entitling the holder to sell poisons and manage a shop in the temporary absence of the employer (p. 33). This would require another new Act.

"THE BUSINESS OF . . . CHEMIST AND DRUGGIST," as well as that of pharmaceutical chemist, are novel but undefined expressions in the Poisons and Pharmacy Act. In the first of a series of expository articles on the Act we deal specially with this "business," endeavouring to show what it means (p. 17). The subject is of direct importance to registered chemists, and indirectly may influence future developments in the trade.

Corner for Students.

CONDUCTED BY LEONARD DOBEIN, PH.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

STUDENTS are reminded that applications for samples of the mixture of salts for analysis, announced last week, will be received up till Monday, January 4, and that the samples will be posted on the following day.

English News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

The Post Office announces an increase of 6*d.* per parcel on the rates of postage on parcels sent to the United States of America by the semi-official parcel-post.

The "British Medical Journal's" latest article on the "Composition of Secret Remedies" is about two diabetes-cures, which are dealt with specially and editorially in the issue of December 26.

The medicated-wine licence attached to the business of Mr. Thos. Williamson, chemist and druggist, at The Cross, Oswestry, has been transferred to Mr. John Howard Llewellyn, chemist and druggist.

During 1908 seventeen more chemists failed than in 1907; the total was 123. Grocers were worse, the total being 1,879, or 207 more than in 1907. This, says *Kemp's Mercantile Gazette*, is from the stress of competition.

Mr. Albert E. Kilner was recently presented with a Sheraton timepiece and a purse of 6*l.* by the Board of Management and staff of the Huddersfield Infirmary, on completing fifty years' service as a dispenser at that institution.

The recommendation of the Sanitary Committee (*C. & D.*, 1908, II., p. 960) was adopted by the Hull Town Council at the meeting held last week, when Mr. A. R. Tankard, F.I.C., was appointed analyst and bacteriologist to the Corporation, at a salary of 350*l.* per annum.

The General Matriculation Board of the Universities of Manchester, Liverpool, Leeds, and Sheffield report that in July last 1,695 candidates, and in September 519 candidates, sat for the Matriculation examination, these figures being an increase on those for the same months of 1907. The offices of the Board are now at 24 Dover Street, Manchester.

The tenth anniversary of the foundation of the Gordon Memorial College at Khartoum, which owes its origin to the initiative of Lord Kitchener, took place on Tuesday, December 29, and the fact is of special interest to the readers of the *C. & D.*, inasmuch as one of the most important branches of the institution is the research work carried on in the laboratories provided by the generosity of Mr. Henry S. Wellcome.

Jane Emily Inglis, of Upper Seymour Street, Leeds Road, Bradford, was at the Westminster Police Court on December 30 committed for trial at the Old Bailey on a charge of unlawfully and fraudulently procuring a certificate of admission to the Midwives Roll. A charge against Dr. F. K. Mareh, of Tennyson Place, Otley Road, Bradford, of knowingly aiding in the commission of the offence was dismissed.

The new pathological department at St. Bartholomew's Hospital, which forms part of the reconstruction and extension scheme of the existing buildings, will be opened early in the year. The total cost of the new building scheme will be not less than half a million, towards which the King contributed the sum of 1,000*l.* on the occasion of the laying of the foundation-stone of the first block of the new premises in 1904. It was thought at one time that the new pathological department might be inaugurated by the Prince of Wales, President of the hospital, but this is not to be the case, and no other arrangements have as yet been made.

Contracts.

Belper Guardians.—Messrs. J. Calvert & Son, chemists, Belper, for drugs.

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Rotherham Guardians.—Messrs. Newton, Chambers & Co., Ltd., for disinfectants and Izal.

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Bolton Guardians.—Mr. John W. Brooks, chemist and druggist, 150 Deansgate, Bolton, for disinfectants.

Barnsley Town Council.—Mr. Ernest Nash, Ph.C., 2 Queen Street, Barnsley, for drugs to the Kindray and Small-pox Hospitals during the ensuing year.

Stanley (Yorks) Urban Council.—Mr. B. Atha, Leeds, for disinfectant-powder, at 5*l.* per ton; Messrs. Newton, Chambers & Co., Ltd., Sheffield, for liquid Izal, at 3*s.* 6*d.* per gal.

Pershere Cottage Hospital.—The Management Committee have decided to obtain tenders for medical and surgical requisites in future. Preference will be given to local chemists as far as possible.

The Chemists' Ball.

We have already intimated that this year's Chemists' Ball is to be held at the Wharfedale Rooms, Great Central Hotel, London, N.W., on Wednesday, January 13. The change from the former shrine of the festivity is believed to be for the convenience of the chemists of the Metropolis, Marylebone now being easily reached from most parts of London by tube or other railways. The effort which was made by the committee last year to prevent undue crowding of the ball-room is continued this year, and it is hoped that a thoroughly enjoyable and happy evening will be the result. The tickets are 12*s.* 6*d.* each for ladies and 17*s.* 6*d.* for gentlemen, but a double ticket for a lady and gentleman is obtainable at 25*s.*, including refreshments, supper, and wine. They can be had from the Hon. Secretary, Mr. Frank U. Stamp, 29 High Street, Hampstead, London, N.W., or from any of the stewards.

Bacteriologist to the King's Household.

This new office in his Majesty's establishment was gazetted on December 23, and the first occupant of it is Dr. Harold Robert Dacre Spitta, B.Sc., of the Bacteriological Department, St. George's Hospital, London, S.W. Dr. Spitta is the only son of Mr. E. J. Spitta, L.R.C.P., M.R.C.S., of Hove, President of the Quekett Microscopical Club, and formerly demonstrator of anatomy at St. George's Hospital Medical School, a noted writer and worker on bacteriology and microscopy. Dr. Harold Spitta was a scholar at the University of Durham College of Medicine, and took the M.R.C.S., L.R.C.P. in 1900, graduating as M.B., B.S. at Durham in the same year, and following this in 1902 with his doctorate. He also holds the Diploma of Public Health from the Cambridge University and several appointments in London hospitals and medical schools.

Shop-hours in London.

The report of the Public Control Committee of the London County Council for 1908 states that the number of shops on the registers of the inspectors is 85,243, at 20,724 of which "young people" under the Acts are employed. These figures are slightly less than those of the previous year, but the number of inspections made was 116,492, an increase on the previous year; 6,479 irregularities were discovered, 5,947 of which were infringements of the requirements to exhibit a notice of the provisions of the Acts, and 532 cases of over-employment were discovered, but in only eighty-five of these was the "young person" employed more than sixty hours a week. There has been a steady decrease in this respect since 1899, when 454 serious cases were reported. Legal proceedings were taken in thirty cases, in all of which convictions were obtained, and penalties and costs amounting to 41*l.* 5*s.* 6*d.* were imposed, and in the others severe cautions were given. The total number of young persons under eighteen years of age employed at shops in London was 32,615, of which 11,546 (6,640 boys and 4,906 girls) were employed indoors, and 21,069 (20,780 boys and 289 girls) outdoors.

"Insured Box" Post.

On January 1 an "insured box" post was established between the United Kingdom and France and Belgium. The service is intended for the conveyance of gold and silver articles (other than current coin), precious stones, jewellery, and valuable articles of a like nature, but not letters, bank-notes, drafts, bonds, or similar securities. An "insured box" must not exceed 2 lb. in weight and must not measure more than 12 in. in length, 4 in. in breadth, and 4 in. in height. The P.O. lays down rules as to the nature of the box and how it is to be tied and addressed. Insured boxes are subject to the Customs regulations of the country of destination, and must be accompanied by Customs declarations prepared by the senders. The postage to be prepaid on an insured box for France or Belgium is 1s., and the insurance fees and scale of compensation are the same as in the case of insured letters—namely, 4d. for the first 12l. insured, and 2d. for each additional 12l. The maximum limit of insurance for both France and Belgium is 400l. (10,000f.).

City of London Territorials.

Mr. C. Trentham Maw presided at a well-attended meeting held in support of this movement at the premises of Messrs. S. Maw, Son & Sons, Aldersgate Street, on December 21. The Chairman (who was supported by Mr. Mowbray T. Maw, Colonel Hyslop, and Colonel Ekins) emphasised the need for recruits if conscription was to be avoided. He also drew attention to the concession which the firm had made in granting three weeks' holiday on full pay to all who joined, and promised that every facility would be given to the men for drills and shooting. Colonel Hyslop then tried to dispel some of the errors commonly held respecting the Army, and fully explained the terms of service. Colonel Ekins pleaded earnestly for recruits, and offered to answer any questions that might be asked. In conclusion, Mr. Wilshaw, an old Volunteer, after addressing the meeting, moved a vote of thanks to the Chairman. This is probably the first meeting of its kind in a City house, and no doubt the good example will be largely followed.

Thefts.

The pharmacy of Mr. H. Hands, chemist and druggist, at 82 Aylesbury Street, Fenny Stratford, Bucks, was broken into on Christmas Eve, and about 1l. in cash and several articles were stolen.

At the Bristol Police Court on December 18, Walter Penny (15) and Joseph Sposits (15) were charged with breaking into the premises of Mr. Alfred Colley, chemist and druggist, 29 North Street, Bristol, on two occasions, and stealing therefrom the sums of 1l. and 18s. 3d., as well as several small items. The boys were found on the roof, and were caught with the goods in their possession. Penny (who was formerly an errand-boy in Mr. Colley's service) was sent to a reformatory, and Sposits was remanded.

Three Window-smashes in One Year.

Patrick Gallagher, tramp, was sent to prison for a month's hard labour by the Henley Magistrates, recently, for breaking a window, value 4l., the property of Mr. G. Turton Green, chemist and druggist, Market Place, Henley-on-Thames. Gallagher went into the pharmacy to sell some small articles, and became abusive after Mr. Green had purchased several. He then threatened to smash the window, which he did later in the evening. This makes the third window-smash since Mr. Green opened his new premises last April. The first was by a sheep, next a horse smashed it, and now the tramp hurled a stone through it.

Birmingham Notes.

Scarcely a week passes but our local press in its "Toilet" articles recommends virginal milk to keep the skin soft. Lest we forget, this is $\frac{1}{2}$ oz. simple tincture of benzoin with 1 pint of rose-water.

Trade has been very quiet with Birmingham chemists this Christmas. All are complaining and things do not look rosy for the New Year. Almost all industries are having a week's "play," which means practically no income to the wage-earning and money-spending public.

Much sympathy will be felt for Mr. Foster, of the General Hospital Dispensary, who last week injured his left hand whilst manipulating a pill-making apparatus. The tip of

one of the fingers of the left hand was cut away, and he will be incapacitated for some weeks it is feared.

Once upon a time many prominent pharmacists of Birmingham received invitations to the mayoral festive functions, but of recent years only a very select few were so invited, and this by virtue of their public work. A further cutting down of the list, which has assumed enormous proportions, is to be exercised, the Lord Mayor having decided to make such gatherings in future thoroughly representative of the city's political, industrial, social, and scientific life.

Wednesday, December 23, was the 102nd anniversary of the laying of the foundation-stone of the Birmingham Dispensary in Union Street. Mathew Boulton was one of its earliest treasurers, and in one year of the closing part of the eighteenth century the patients numbered 280. Last year they totalled 53,000. In this connection the death of Dr. Alexander Bottle should be recorded, which took place in London on the anniversary day. He was a son of the late Mr. Alexander Bottle, of Dover, and was well esteemed in the city and by those who frequented the dispensary.

Shortly after midnight on Sunday, December 27, a fire broke out on the premises of Messrs. Southall Bros. & Barclay, Ltd., manufacturing chemists, Birmingham. The firm own an extensive block of buildings immediately adjoining the Albion Hotel and running back parallel with Corporation Street as far as the Lower Priory. The flames spread with such rapidity that the Chief Superintendent of the Fire-brigade at once deemed it necessary to call out all his available strength, and in a very short time four fire-engines were on the spot and twelve jets of water were being directed on the burning buildings. For the first time a recently acquired water-tower was brought into requisition, and from the top of this a fireman was able to direct a copious stream of water through the upper windows, where the seat of the fire appeared to be. To say nothing of the fact that the temperature was below zero, the work of the firemen was carried out in circumstances of unusual difficulty and danger owing to the fact that the thoroughfare running alongside the building is extremely narrow, while there was the constant dread that an explosion of some of the materials stored on the premises might at any time cause a collapse of the walls. Scarcely fifteen minutes had elapsed after the firemen had got to work before portions of the roof fell with a crash, and directly afterwards there followed a series of explosions, which continued at frequent intervals and could be heard at a considerable distance. The seventy-four firemen worked with tremendous energy for quite an hour and a half before they gained the mastery. The damage done is considerable, but fortunately it was confined to one section—the perfumery factory and still-rooms, which were situated on the two upper floors of the Dalton Street premises. It is owing to the promptitude and ability of the fire-brigade that the fire was kept within such a comparatively confined area, and consequently the business of the house can be carried on practically without interruption.

[Messrs. Southall Brothers & Barclay, Ltd., inform us that the pharmaceutical laboratories, drugs section, druggists' sundries, and several other departments and offices were untouched, and they are therefore in a position to execute orders without delay. They also desire to thank their friends in the wholesale trade both in London and the provinces for kind offers of help.]

Children's Cough-mixture.

An inquiry was held by the Fulham Coroner (Mr. C. L. Drew) respecting the death of Dorothy Jones, aged twenty-two months, the daughter of a canvasser. The child first received home treatment for measles, but a cough followed and the father went to Mr. W. P. Brawn's pharmacy, 84 Fulham Palace Road, Hammersmith, W., and obtained threepennyworth of cough-mixture. The child was given one dose. She was in a drowsy condition next day and was found dead on the following morning. In answer to the Coroner the mother said the child suffered from shortness of breath since birth. She had only given the baby one dose of the medicine.—Edward Raymond Brawn,

assistant to his brother, who is a qualified chemist, said he himself was unregistered. He sold the medicine and labelled it "Poison" in accordance with the regulations. Mr. Carver, a qualified assistant, was in the shop at the time, and witness only served the mixture from a stock bottle. It contained syrup of red poppies, paregoric, squills, and ipecacuanha wine.—Dr. A. F. Miller said death was due to syncope from bronchial pneumonia. He would not say death was accelerated by the mixture, nor could he say it was a natural death.—The Coroner adjourned the inquiry for analysis of the stomach-contents.

Labelling Ammonia.

At the inquiry held at Bridlington on December 22 respecting the death of Wm. Wright Wilson (*C. & D.*, December 26, p. 978), Mr. William Whiting, pharmaceutical chemist, Hilderthorpe Road, Bridlington, stated that although liquid ammonia was not a scheduled poison, he labelled it "For external use only," and always used labels printed in red to distinguish it from a medicine to be taken internally. An indistinct label would have been renewed. On the Coroner (Mr. Luke White, M.P.) observing that it would be safer to label ammonia "Poison," Mr. Whiting said that if a person brought a whisky-bottle for ammonia he always labelled it "Poison," because of the danger of anyone mistaking it for whisky.

Irish News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Contracts.

The Governors of the Westmeath Infirmary have accepted the tender of Mr. Thomas P. Whelehan, pharmaceutical chemist, Mullingar, for the supply of methylated spirit at 3s. 3d. per gal. and Jeyes' disinfectant fluid at 11d. per pint.

Personal.

Alderman J. C. McWalter, proprietor of Dr. Leonard's Medical Halls, Dublin, has got the City Corporation to pass a resolution expressing the opinion that women should be granted the Parliamentary franchise.

Mr. H. C. Grimes, Dublin representative of Messrs. Evans Sons Lescher & Webb, Ltd., has been elected a member of the executive committee of the Dublin branch of the United Kingdom Commercial Travellers' Association.

Analyst's Salary.

At the weekly meeting of the North Dublin Board of Guardians on December 30, a letter was read from Sir Charles Cameron, C.B., stating that he had read Mr. Muldoon's observations on the opinion of the Local Government Board in reference to his (Sir Charles's) application for remuneration for the large amount of analytical work which he had performed for the Guardians (see *C. & D.*, September 26, 1908, p. 503). Sir Charles stated that Mr. Muldoon's remarks are wholly irrelevant to the subject of his claim. No one has asserted that the Guardians have power to appoint a public analyst under the provisions of the Sale of Food and Drugs Act. But because a Board of Guardians cannot appoint a public analyst, it does not follow that the Guardians cannot pay a public analyst appointed by the proper authority, either by a fee for each analysis or by a retaining-fee for general work. According to Mr. Muldoon's argument, a public analyst is not only obliged to perform analyses for the authority appointing, but must do so to an unlimited extent for bodies who have not appointed him, and do not pay him anything. Sir Charles enclosed a letter from the public analyst for Belfast showing that in Belfast a charge of 7s. 6d. is made for each analysis carried out for the Board of Guardians. It is also to be borne in mind that the work which he (Sir Charles) generally had performed was not altogether in relation to the provisions of the Food and Drugs Act. There is, for instance, a standard for milk under the Act, but the Guardians have fixed another and higher standard, and the object of his analyses is to show whether that standard is maintained. The letter was referred to a committee of the whole Board.

Scots News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

The Supply of Antitoxin.

The Kirkcaldy District Committee of the Fife County Council has decided to supply diphtheria antitoxin in cases which the doctors report to be necessitous.

Aberdeen.

The offer of Mr. J. R. Henderson, chemist, Cullen, for the supply of medicines for 1909 to the Seafeld Lodge of Oddfellows has been accepted.

The illustrated almanack for 1909 which Mr. J. M. Birnie, chemist, Holburn Street, has distributed among his customers contains a considerable amount of useful information.

Fire broke out last week in premises adjoining those of Mr. J. M. Patton, chemist, Bridge Street. It spread to the cellar of Mr. Patton's shop, but was extinguished before any damage had been done.

At this season perfumes are the all-prevailing feature of chemists' windows in the city. Very attractive displays are to be seen in the windows of Mr. R. Hunter, Union Street; Mr. P. D. Milne, Market Street; Messrs. Mortimer & Dunn, Union Street; Mr. John T. Cran, Victoria Road; and Mr. A. P. Wallace, Victoria Road. Mr. Wallace's method of display is rather original. In the centre of his window is a revolving pyramid with circular plate-glass shelves laden with perfumery. It is worked from beneath by a small cleverly constructed motor. We believe that this is the first instance of motor power being used by an Aberdeen chemist for the purpose of window-display. Several chemists who do not go in for window-dressing have their counter-cases well filled with cased goods.

Dundee.

The proposal to open a dispensary for the poor in Loches district is not favourably received by the trade. They consider this branch of the Royal Infirmary work might well be left to the chemists in business.

Mr. G. D. Macdougald, analyst, Dundee, has published a table giving the average quality of the public milk supply, for the counties of Forfar, Perth, and Fife during 1907-8, as deduced from over 1,000 analyses. The average for the counties and towns is: Fat, 3.66; non-fatty solids, 8.77.

A tintometer for determining the density of smoke emitted by chimneys has been invented by two Dundee gentlemen. It is a telescope-like apparatus, with one clear aperture and a revolving diaphragm having six tints graded in accordance with Ringleman's charts. It is marketed by Mr. John W. Lowden, Dundee.

A Pharmaceutical Esperantist.

Mr. John D. Cummings was the lecturer at the weekly meeting of the Alloa Debating Society held on December 25, the subject being "Esperanto." The main argument was the facility with which the new language can be learnt. The lecture was not without after-results, for the editor of the "Alloa Journal" received the season's greetings in Esperanto, which, however, was at first mistaken for a German lottery ticket; while "Wanderer," in the same contemporary, says the audience were impressed by the local expert, but it was a bad time to begin.

Edinburgh Pharmacy Athletic Club.

In connection with the above club a football team has been formed. Two matches have been played and won by the Pharmacy eleven. The second match was played on Christmas Day against Hanover Athletic, a rising Edinburgh junior team, who suffered defeat by three goals to two. The following represented the Pharmacy Club: Goal, Keddie; backs, Margach and Hardie; half-backs, McBain, Mark, and Forsyth; forwards, Muir, Milne, McArthur, Wilson, and Young. Members of the billiard section are reminded that entries for the second handicap tournament close with Mr. Clements, 28 Newington Road, on January 8.

Glasgow and the West.

Mr. James Young, chemist and druggist, of Messrs. Cockburn & Co., Ltd., St. Enoch Square, Glasgow, has

been appointed manager of the business of the late Mr. Farquhar, chemist and druggist, Greenock.

The Walgray Manufacturing Co. inform us that the company has been reconstructed, and the offices are at 212 St. Vincent Street, Glasgow.

Some unusual cases of poisoning have occurred in Glasgow. A labourer named William Kirkwood (28), his wife, and two children were admitted into the Glasgow Royal Infirmary on December 27 suffering from some form of poisoning, the condition of the children being serious. It appears that a tramcar collided with a loaded dray on the previous Thursday. Several barrels containing a powder were knocked off the van and burst open. Mrs. Kirkwood gathered some of the powder, and took it home and used it as baking-powder, with the above results. Other bystanders also took a supply, so there may possibly be still further developments.

Welsh News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

The Blizzard.

Cardiff and district suffered severely in the snowstorm, which raged for about fifteen hours. Business has been practically at a standstill for two days.

Soldier Smashes Window.

On December 29, Peter Wilson, gunner, Pembroke Dock, was committed for trial at the Quarter Sessions. Wilson entered the pharmacy of Mr. A. Llewellyn Williams, chemist and druggist, at 28 Commercial Road, Pembroke Dock, while under the influence of drink. He then attempted to take a box of pomade, but was ejected. He afterwards returned and broke a plate-glass window, value 9l. 10s., with his cane. An assistant, named Harris, was severely cut on the face by a fragment of the flying glass.

The Week's Poisonings.

TEN fatalities with poisons have occurred during the week, including four misadventures. The poisons taken were one in Part I. and six in Part II. of the Schedule, while three were unscheduled. Owen H. Gilman died at Liverpool from muscarine-poisoning (p. 13).—Caroline Leebetter (18) took oxalic acid at Manchester as she was a few shillings short in her accounts with the "toffee-club" of which she was the Secretary.—Dr. Frederick T. Walmsley died at Preston from excessive doses of bromide and chloral mixture.—The usual verdict was given at the inquest respecting the death of Catherine Dumelow, who died from carbolic-acid poisoning. Deceased said that she had "tasted" the acid.—Helen O'Neill (40) died at Maxwelltown in consequence of swallowing a quantity of carbolic acid, which she drank from a beer-bottle before discovering her mistake.—Herbert Martyn (26) ended his life at Dublin by taking laudanum with suicidal intent.—Charles W. Taylor walked into a Newcastle police-station and stated that he had drunk a quantity of laudanum. He collapsed shortly afterwards, and subsequently died in the infirmary.—Eli Hutchinson (57), hawker, died in the Leeds Infirmary from the effects of taking spirit of salt.—Mary Reeves (22) committed suicide at Walsall by taking salt of lemon. At the inquest a chemist stated that he did not know whether he had supplied the poison or not, as he had "about a hundred people on the Monday who wanted salt of lemon."—At a Sunderland inquest it was stated that deceased had taken some fluid for cleaning beer-pipes (caustic-soda solution?) by mistake. The fluid was marked "Non-injurious."

ANGOLA BEESWAX.—The exports from the various ports of Angola during 1907 amounted in value to 65,726l., against 74,017l. in 1906.

Of all the gratuities which arrive at this season nothing so much portends a prosperous New Year as 'THE CHEMISTS' AND DRUGGISTS' DIARY, and to say of it the truth, the whole truth and nothing but the truth, besides being impossible, would be a semblance of flattery.—T. Pestlethwaite, Southsea.

French News.

(From the "C. & D." Paris Correspondent.)

PHARMACISTS' ASSISTANTS.—Under the title of the "Office National Pharmaceutique," the Assistants' Federation has organised free registry-offices for managers, assistants, laboratory porters, packers, *locum-tenentes*, etc., in Paris and eighteen other French towns—Lyons, Bordeaux, Nantes, Marseilles, Rouen, Le Havre, etc. The interesting feature of the experiment seems to be the mutual aid that provincials may thus give Parisians, and *vice versa*, in finding situations.

THE UNIFIED PRICES.—The Belgian National Pharmaceutical Association has addressed a letter to the General Association of French Pharmacists, suggesting that the system adopted in Belgium for the unification of prescription charges should be followed by their French confrères. When the Belgian pharmacist dispenses prescriptions he indicates, by a private mark, the price which he has charged the client. "D.do" is 2 francs 20, "U.zc" 1 franc 75, and so on. It is suggested that French pharmacists should use the same alphabet, as they have the same coinage and to some extent the same language.

UNDER THE TITLE "A PHILANTHROPIC DOCTOR" a journal publishes the text of a circular posted to medical men by a Parisian practitioner. The final note of this circular gives the key to the enigma, viz.:

The price of a box of 10 ampoules of bacillosine No. 0. 1, or 2 is 50f. The 25 per cent. discount granted by manufacturers to pharmacists ought more logically to be reserved to doctors. These latter, by addressing a P.O. for 37.50f. to Dr. Vaillant, 15 Rue du Temple, Paris, will receive post-free a box of 10 ampoules. If the client orders direct, he must send 50f. to the same address; in this case a P.O. for 12.50f. will be discreetly returned to the doctor treating the case.

HOME-MADE NITRATES.—M. Muntz and M. Bazin have recently taken out patents for the manufacture of nitrate manure (to replace the Chilian nitrate, which increases in price yearly). It is practically a revival of the old saltpetre industry which flourished in France at the time of the Revolution, except that peat is substituted for plaster and the nitrifying microbes are cultivated. Ten per cent. of powdered chalk, a little phosphate, and 50 per cent. of water are mixed with the powdered substance, the whole is heaped up in a barn kept at a summer temperature (20° to 25° C.), and is watered with some suitable liquid—a solution of sulphate of ammonia, liquid manure or water from gas-works.

VETERINARY SERUMS.—The Paris agent of the Lille Pasteur Institute having refused to deliver veterinary serums to a pharmacist except on the prescription of a veterinary surgeon, an inquiry was instituted by the General Association of French Pharmacists. It appears that certain serums cannot be otherwise obtained; and that it is thus practically impossible for the pharmacist to stock them. As the law prescribes that the actual vaccination of the sick animal may only be legally made by a qualified veterinary, this additional precaution seems to be calculated to handicap the general adoption of possibly valuable serums as well as to hamper the more enterprising class of pharmacists. The Association, therefore, proposes to follow up the matter.

A PROTECTION SCHEME.—An "Association Co-operative des Pharmaciens de France and des Colonies" (A.C.P.F.C.) has been proposed to protect pharmacists who are in a small way of business. Not to quote the twenty-four articles *in extenso*, it may be briefly noted that the general idea is to secure the exclusion of cutting pharmacists by a system of ballot, and to have a number of proprietaries prepared by the members themselves and sold to all members at half minimum prices. For a product marked 3f., for example, the minimum retail sale price would be 2.70f. The pharmacist would buy it from the Association at 1.35f. It is, however, proposed to allow members to sell their proprietaries to non-members under certain conditions. In this case, 10 per cent. of the sale price would be handed to the departmental agent, 17½ per cent. to the pharmacist-proprietor of the product, and 17½ per cent. to the Association.

RE-EXPORTING "PATENTS."—The statement has been made that legislative measures, calculated to reduce or abolish the manufacture of patent medicines in France, would seriously prejudice a lucrative branch of French export trade. M. Fortuné, of Béziers, writes to a trade journal expressing doubts as to whether the total figure of the patent medicine export trade is not grossly exaggerated. He cites the instance of a Parisian pill firm which sends its head chemist to Barcelona to superintend the manufacture of goods for the Spanish market, and adds that in Barcelona a special factory exists where several French firms send in turn their skilled employés to manufacture on the spot. This is also done, he adds, in several other cities, notably in South America. Mr. Fortuné has, of course, no particular love for patent medicine manufacturers.

Canadian News.

(From the "C. & D." Correspondent.)

AN UP-TO-DATE DRUG-STORE has been opened at the corner of St. Catherine and Mackay Streets, Montreal, by Mr. C. T. Milne. It is one of the most attractive in the Dominion. All the permanent fixtures are in solid mahogany, which is intersected by handsome plate-glass mirrors.

THE ONTARIO MEDICAL COUNCIL has addressed a circular letter to Crown attorneys asking them to report to the Council any allegations of unprofessional conduct on the part of medical men which may be brought to their attention. Trouble is also brewing between this Council and the Retail Druggists' Association in Toronto, as a result of the use by the Council of a system of informers who have been the cause of several druggists being fined recently for furnishing them with lotions for imaginary ailments. Many medical men feel that such methods are degrading to the medical profession, and promise to have the matter investigated. Druggists claim that in the Kipp case there was no breach of the Act, and that the conviction was secured on false promises. An appeal is to be lodged.

India and the East.

(From the "C. & D." Correspondent.)

S. V. METH. IMPORTS.—The imports of methylated spirit into India increased from 40,566 gals., worth Rs. 69,755, in 1903, to 208,308 gals., worth Rs. 286,394, in 1907-8. In other words, the imports have quintupled in the course of five years.

MORPHINE RESTRICTIONS IN BENGAL.—The Government of Bengal in April last imposed restrictions as to the quantity of morphine that may be possessed by an unlicensed person, the quantity being fixed at 10 grains. A licensee may stock a reasonable quantity, but must not sell more than 10 grains, and this only on the production of a regular medical prescription. The reasons for the order were that complaints of illicit trade *via* Calcutta were received from the Government of Burma.

MORPHINE-TRAFFIC IN BURMA.—The Excise Department report for Burma in 1907-8 states that thirty-four licences were issued to pharmacists for the sale of morphine, as against thirty-six in the previous year. There was a decrease in morphine-consumption in Rangoon, and many dens had been closed, but there are indications of the spread of the habit to the Pegu and Tharrawady districts. A leaflet in Burmese and Chinese on the harmful effects of the morphine-habit is being distributed through the above districts. The use of the drug is at present confined to the lower classes. The amount seized in Rangoon was 470 "tolas," against 419 tolas, and sixty-four cases were detected, as against 120 in 1906-7. The largest seizure was one of 100 oz. imported from Calcutta, while another large seizure of morphine pills was made in the Ruby Mines district. The latter were being imported by a Hindoo from a native practitioner in Calcutta.

African News.

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

South African Pharmaceutical Association.
Pharmaceutical Society of Cape Colony.
Natal Pharmaceutical Society.
Transvaal Pharmaceutical Society.
Rhodesia Pharmaceutical Society.
Northern District Chemists' Association.
Pharmaceutical Society of Orange River Colony.

British East Africa.

NEW BUSINESS.—Mr. A. H. Wardle, pharmaceutical chemist, opened "The Nairobi Pharmacy" in Government Road, Nairobi, last September. Mr. Wardle will conduct the business on modern lines with up-to-date and accurate dispensing, while analytical work will be undertaken. Portable medical outfits will be a speciality.

Cape Colony.

NEW CHEMISTS AND DRUGGISTS.—Upon the recommendation of the Colonial Pharmacy Board, the Colonial Secretary has issued licences, under the provisions of the Medical and Pharmacy Act, 1891, authorising the undermentioned persons to practise as chemists and druggists in Cape Colony: William Leiper Archer, chemist and druggist, Pharmaceutical Society of Great Britain, 1908, and William John Smith, chemist and druggist, Colonial Pharmacy Board certificate, 1908.

THE PRESS AND THE CHEMIST.—A leader published in the Government organ in Cape Town on November 30 addresses some rather severe remarks to chemists and druggists *re* the medicine-stamping regulations. It is entitled "Evading a Tax," and commences by stating that "there seems to be an intention, or at any rate a desire, on the part of certain chemists and druggists in the Colony to evade the provisions of the Act." The writer professes to see in the action of the trade at Queenstown a political motive. Continuing, he points out that although the omission of a penalty clause precludes action being taken in the criminal courts, the authorities will in every case brought to their notice take action in the civil courts, where the costs will in the long run amount to as much as a fine. The writer concludes by stating that "the few others who may be disposed to follow the illegal example of the Progressive pill-vendors of Queenstown will find that defiance of the law does not pay."

Transvaal.

"THE DRUG FIEND" was the title of a column article published by the "Rand Daily Mail" on November 28. It dealt chiefly with the cocaine-habit, particulars being given of one case, but it was stated that

There are to-day in Johannesburg many victims to this habit... The opium-habit, which is also very prevalent in Johannesburg, is far less dangerous, owing to the fact that opium is usually smoked in dens, and cannot be taken unobserved like cocaine. To show the extent to which the habit has spread, some little time ago during a short railway journey I noticed a fellow passenger inject the drug into his leg at frequent intervals. Between the injections he seemed to be in a state of dreams, but gradually he became restless, and although one could see him struggling against the longing to inject the drug again, his will-power was feeble, and again and again he had recourse to the syringe.

BUSINESS CHANGES.—Mr. J. A. Williamson, formerly of Messrs. Bedford & Co., Queen Street, London, has taken over the business of Mr. F. Ingram, chemist, corner of Biecard and Smit Streets, Braamfontein, Johannesburg. Mr. Williamson has been a number of years in the Transvaal, and is well known in Johannesburg.—A pharmacy, under the title of the "Staats Apotheek," has been opened in Machadodorp, a village on the Delagoa Bay railway line about two hundred miles from Johannesburg.

"A NEW POISON: KILLS ONLY RATS" was the title of a paragraph in a weekly newspaper. It turned out to be the "sea onion" (squill) mixed with potatoes and fried with fat to crisp cakes.

Australasian News.

The fullest information regarding the Australasian drug-trade and pharmacy is given in "The Chemist and Druggist of Australasia," copies of which can be obtained at 6d. each, post free, from the office of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

The Commonwealth.

COMMERCE (TRADE DESCRIPTIONS) BILL.—This Bill (see *C. & D.*, December 19, p. 929) has been considered by the Manufacturing Chemists' and Proprietors' Association, and been referred to the Proprietary Articles Section of the Sydney Chamber of Commerce.

FEDERAL BOARD OF PHARMACY.—Mr. A. B. Chater (President of the Pharmaceutical Society of Queensland) is to move the following resolution at the forthcoming Pharmaceutical Conference:

1. That it is desirable to establish a Federal Board of Pharmacy that shall be able to speak for all Australian pharmacists on subjects of common interest.

2. Purposes of the Board. (a) To secure recognition by the Commonwealth Government as an advisory board on all matters of public health relating to importation of drugs or otherwise. (b) To exercise advisory power in endeavouring to bring all pharmacy legislation, curricula, and examinations into line. (c) To issue a diploma when advised by the State Examining Body that the applicant has passed the examination and is fit to become a master (or Fellow) of the F.B.P. (d) To secure legislation to protect the title. (e) To obtain a grant to further these objects. (f) To foster Australian pharmacy. And later (g) to establish a school of research for Australian drugs. (h) To obtain best expert evidence on the various tests of drugs, &c., in order that pharmacy may be ready for an Australian pharmacopeia.

3. Suggested Personae of Board.—Presidents of all State boards. Chief medical officers of public health of each State. Secretary (a pharmacist of federal capital at, say, 50*l.* p.a.).

4. Financial.—Diplomas at 1*l.* 1*s.* Subsidy by Boards of States. Grant from Federal Government.

New South Wales.

THE PURE FOOD BILL has passed its second reading and the Committee stage in the Legislative Assembly (see *C. & D.*, October 3, 1908, p. 538).

FIRE.—One of the largest of the bond stores at the Balmain Works of Messrs. Elliott Bros., Ltd., wholesale druggists and chemical-manufacturers, Sydney, was destroyed by fire on November 24. The fire began in a heap of straw by the side of a pile of wooden cases, and the whole building was soon involved. The damage done, estimated at 20,000*l.*, is covered by insurance.

STRYCHNINE FOR QUININE.—An inquest was held in Sydney on November 11 into the circumstances of the death of Ruth Lee, aged nineteen, who died from strychnine poisoning. The evidence brought out the fact that during the illness of Mr. Thomas Kirk, chemist, Miss Lee and her sister called at his shop for something for a bad earache. Mrs. Kirk went upstairs to her husband, who told her to tell their son (a clerk) to weigh up 10 grains of quinine. In error strychnine was employed, the bottle containing it being near that in which was quinine. The dose proved fatal in a few minutes.

Tasmania.

"VIDE POISON."—In the Tasmanian House of Assembly on November 18 a question arose as to the interpretation of "patent medicine." Mr. J. D. Wood, entering the Chamber with a ponderous volume, turned up an interpretation, and found the advice "*vide* poison."

PHARMACY BILL.—Attention having been called to the antiquated Medical Act of 1847 (see *C. & D.*, September 26, 1908, p. 508), under which pharmacy has been regulated in Tasmania for nearly sixty years, the Government immediately announced that they would undertake the revision. The Council of the Pharmaceutical Society with the Court of Medical Examiners has apparently been consulted, and while a Medical Bill is probably on the stocks a Pharmacy Bill was drafted, submitted to Parliament, and by November 20 had passed through all its stages—surely a record in pharmaceutical legislation. The Bill is

based on the Pharmacy Acts that have now become the usual pattern for Australasia. A Pharmacy Board of seven members is to be constituted the first Board, and appointed to hold office for twelve months; all succeeding Boards to be elected for three years by the whole body of pharmaceutical chemists in Tasmania. A register is to be established from which names are to be struck if the addresses become unknown, and registrars of births and deaths are to give information of the death of any pharmaceutical chemist. Conviction for an offence under the Act or of any felony or misdemeanour which in the opinion of the Board renders the offender unfit to be on the register will be sufficient ground for the erasure of a name from the list. An annual list is also to be published, including the names of those who have paid the annual fee of one guinea entitling the holder to carry on the business of a pharmaceutical chemist during the currency of such certificate. All who hold a licence to vend medicines or drugs in Tasmania from the Court of Medical Examiners are to be entitled to registration as pharmaceutical chemists; secondly, pharmaceutical chemists or chemists and druggists of Great Britain or Ireland or of other colleges or boards of pharmacy recognised by the Board are to be entitled to registration; thirdly, all future registrations will have to be obtained by four years' apprenticeship with a preliminary examination passed before the date of apprenticeship and a final examination in the subjects of practical pharmacy, chemistry, and any subject that may be prescribed by the Board. The usual titles are protected, and it is made an offence for anyone not being a registered pharmaceutical chemist to carry on, or attempt to carry on, business by keeping an open shop or place of business for the compounding or dispensing of prescriptions or for vending any medicines or drugs. Branch shops are to be managed by registered pharmaceutical chemists. Any pharmaceutical chemist who carries on business without his annual licence is to be liable to a penalty not exceeding 10*l.* The rights and privileges of legally qualified medical practitioners and of wholesale importers are conserved, and the executors, etc., of a deceased pharmaceutical chemist may continue the business indefinitely under the management of a registered pharmaceutical chemist. The Board is given power to make arrangements for reciprocity. Pharmaceutical chemists actually in business are to be exempted from jury service. Provision is made to allow unregistered persons to sell medicines or drugs at any place distant more than two miles from the place of business of any registered pharmaceutical chemist, provided that such medicines or drugs shall be sold in unopened packages made up by or bearing the label of some registered pharmaceutical chemist. While the Bill was in Committee a clause was added providing that persons who have been continuously employed by qualified chemists in Tasmania in dispensing medicines for a period of four years prior to the commencement of the Act shall be entitled to be registered upon passing, within two years, an examination in practical knowledge of the business of a dispensing chemist, without any preliminary examination. Persons claiming the benefit of this section must register their names with the Board on or before March 31. Power to conduct an intermediate examination in subjects prescribed by the Board was also given, in addition to the final examination in the subjects of practical pharmacy, chemistry, and any subject prescribed by the Board. The Legislative Council on November 20 introduced a few further amendments. An accidental vacancy on the Board is to be filled by co-option. A fresh clause was inserted giving the right of appeal to the Supreme Court to any person who considers that he has been unreasonably refused a certificate, licence, or registration. The clause relating to branch shops was re-cast. The clause relating to reciprocity arrangements was altered so that the arrangements will be made with the Pharmacy Board and not with the particular State, and power was also given to make such arrangements with the Pharmacy Board of any other British Colony.

Victoria.

RECIPROCITY.—The Pharmacy Board of Victoria is preparing a regulation to be submitted to the Governor, which will give the Board power to recognise all duly registered persons whose names appear upon the Western Australian register. This is more than was asked for.

West Indian News.

(From the "C. & D." Correspondents.)

TRINIDAD has suffered much inconvenience of late on account of bubonic plague and yellow fever being prevalent there. Now, however, cleans bills of health are being issued, no fresh cases of either disease having been notified.

BARBADOS.—Mr. Cyril Hinds, who sat for the Barbados scholarship a couple of years ago, on the science side, while at Harrison College, and who subsequently left to seek employment in America, has been appointed assistant chemist to the American Sugar Co. at their "Constantia" Factory, Cuba.

DEMERARA.—Mr. Wilson, who last December came from England to join the staff of Messrs. Scott & Co., chemists and druggists, has left their service and is now travelling in the West Indies for the Davol Rubber Co., Rhode Island, U.S.A.—Trade generally during the last two months has been dull in the Colony, and the pharmacies have been no exception to this general rule. They, however, have fared a good deal better than the average trader on account of the amount of sickness that has been prevalent. The dispensing departments have been kept going at high pressure.—All sections of the community have been distressed to hear of the sudden demise of Mr. John McCormick, who came out on October 24 from Mull, Argyllshire, to the dispensing department of Messrs. Brodie & Rainer's store in New Amsterdam. He felt out of sorts on Sunday, November 22, and as he was no better by Monday, his friends advised him to go to the hospital, where he passed away on the Tuesday. Death was due to "blackwater fever." The funeral took place on Tuesday afternoon, and the hearse was followed to the grave by many of the public men of New Amsterdam and a great number of private friends; for although he had only been here so short a time, Mr. McCormick had, by his genial manner, made a host of friends.—Some interesting cases have been heard at the city police-court during the past month, in which chemists have been charged with technical offences. An East Indian named Jungadeen was summoned for not placing a board at the entrance of his shop bearing the name of the person who was licensed to sell drugs and poisons, and further for keeping his shop open for their sale when he was not licensed as a chemist and druggist. He was ordered to pay a fine of \$17 and costs, or go to prison for five weeks.—Mr. A. Bentham, Lot 220, Camp Street, was charged with not employing a person at those premises qualified to sell drugs. He pleaded that he did employ such a person, and that, although he himself gave the customer 4c. worth of carbolic acid asked for, this assistant superintended its preparation. The Magistrate reserved decision. Similar charges against Messrs. R. Z. King and B. Alexander were withdrawn.—On December 12 the Stipendiary gave his decision in Mr. Bentham's case, finding the charge proved, and imposing a penalty of \$15. The decision has given rise to considerable discussion in pharmaceutical circles.—Mr. B. Thompson and Mr. C. O. Rainer, the two Georgetown chemists who have for many years represented the ratepayers upon the Town Council in South Cumingsbury and Newtown, have been re-elected.—The tenders of Messrs. Smith Bros. & Co. and Messrs. Brodie & Rainer for supplying medicines to the Government for the year ending December 31, 1909, have been accepted.

ALGERIAN OLIVE OIL.—The exports of olive oil from Algeria during 1907 showed a value of 104,360l., or 2,609 tons, which was considered satisfactory. The Government is awarding annual prizes for the culture of the olive-tree, which formerly flourished on the North Coast of Africa, and most stringent instructions have been issued to the municipalities to exploit for the community the numbers of wild olive trees.

CHINESE WOOD-OIL.—The British Consul at Foochow states that the compradore of one of the British firms at that port has started a plantation containing 400,000 trees of *Aleurites cordata*, from which Chinese wood-oil is obtained. This plantation has been in existence for two years, but the proprietor hopes by the end of five years to find it a paying concern.

American Notes.

(From the "C. & D." Correspondent.)

PURE-FOOD LAW.—"Repairs and Rejuvenates the Eye and Sight" is an alleged illegal and false brand placed on "Eyelin," a medicine made by the "Eyelin" Co. The company is being prosecuted in Chicago.

PARKE, DAVIS & Co.'s stockholders are to receive an extra 3-per-cent. dividend, making 11 per cent. for the whole year. The authorised capital is \$8,000,000, and all but half a million dollars is paid up.

STALLMAN & FULTON.—It is announced that the unsecured creditors of this company, which failed last spring, will probably receive a dividend from the proceeds of the sales of the company's merchandise early in January, before the final accounting of the company's affairs is made by the assignee.

FOOD AND DRUG INSPECTORS.—In order that there may be a certain harmony in the enforcement of the Federal and the various State food and drug laws, the Secretary of Agriculture at Washington has adopted the policy of appointing State inspectors to act as national inspectors also. This wise step will doubtless avoid a good deal of confusion, which had already begun to make itself felt.

SHORTER HOURS.—American druggists are slowly waking up to the fact that they have been slaves to custom for many years, and they are now endeavouring to shorten their hours of work somewhat. One hundred and twenty pharmacists in Detroit, Michigan, have agreed to close their shops on Sunday about half of the day, while fifty druggists in Hoboken, near New York, will shut up their shops for three hours on Sunday afternoon.

COUNTER-PRESCRIBING, while probably not as general in the United States as in England, is still practised to a greater or less extent. Hence the importance of a decision just rendered by a St. Louis judge who held that a druggist, in selling a whooping-cough medicine to a woman who asked his advice, was not going beyond his clear rights. The case, however, will be appealed to a higher Court. The doctors of St. Louis are making an issue of it.

A JOINT MEETING.—Committees of the A.Ph.A. and the N.A.R.D. are now conferring in an effort to arrange a joint meeting of the two Associations this year. The A.Ph.A. is primarily a scientific body; the N.A.R.D. is chiefly commercial; but they have many interests in common, their membership is to a certain extent duplicated, and a meeting held at the same time and place would be of equal benefit to both organisations. The idea is meeting with very general favour.

THE USE OF PRESERVATIVES in fruit syrups for aerated-water making has been seriously interfered with by the Federal and various State food and drug laws during the last few years. Of three Western States, North and South Dakota have now decreed that no preservatives of any sort or nature whatsoever will hereafter be permitted in these products, while Minnesota has declared that sodium benzoate may be used in quantities not exceeding one-tenth of 1 per cent. up to December 1, 1909.

FOR HIS WIFE.—An interesting incident has recently developed in the city of Boston. A pharmacist's wife, helping her husband out in the capacity of a saleswoman, made an illegal sale of liquor. Prosecution was immediately begun against her. The proprietor of the store promptly went to her assistance, requested that all proceedings be directed against him, and he is now facing the possibility of spending six months in gaol. Could a husband's gallantry and fealty be put to a severer test?

BUYING-CLUBS.—Despite the opposition of the wholesale trade, co-operative buying-clubs among the retail druggists continue to develop in the United States. Three of these concerns in the Eastern States have just closed another year of business, and report prosperity all along the line. The Brooklyn Consolidated Drug Co. has been particularly successful, and at its recent meeting it defied the jobbing trade in very vigorous terms, declaring that if wholesalers continued to indulge in hostile attacks upon the company it would retaliate by encroaching still further upon the

jobbers' "prerogatives." Further developments in this unique situation will be worth observing.

BAY-RUM DUTY.—Whether Porto Rican bay rum, imported into the United States, shall be made to stand a revenue tariff of \$1.10, and thus be increased in price to that extent, has been a moot question during the last year, and has caused importers and the drug-trade generally a great deal of confusion and trouble. Up to now the courts and the revenue authorities have been at cross purposes, and decisions have been made and suspended with irritating frequency. Congress now proposes to settle the question by enacting a law specifically imposing a tariff duty of the amount mentioned. In the meantime the present revenue tax is suspended pending the trial of a test case in the courts.

A.P.H.A.—A Washington branch of the American Pharmaceutical Association has been organized, Dr. H. W. Wiley is President and Mr. M. I. Wilbert, Secretary. The new system of electing the officers of the A.P.H.A. by post has been put in operation, and those who take office at the conclusion of the 1909 session are *President*, Professor H. H. Rusby (New York); *Vice-Presidents*, Mr. C. B. Lowe (Philadelphia), Mr. C. W. Johnson (Seattle), and Mr. W. B. Day (Chicago); *Members of Council*, Professor Oscar Oldberg (Chicago), Mr. G. M. Beringer (Camden), and Professor C. E. Caspari (St. Louis). Some 2,000 voting-papers were sent out, and of these 861 were returned.

PROPRIETARY PRESCRIPTION INGREDIENTS. The following list of proprietary ingredients in newspaper prescriptions was given in a paper by Mr. C. B. McCall at a joint meeting of the North-Western Branch of the American Pharmaceutical Association and Hennepin County Medical Society:

Concentrated oil pine.	Prosene com. Cooper.
Virgin oil pine, pure.	Laxona de composee.
Compound lecto.	Com. ess. cardiol conc.
Compound barkola.	Glyacol com.
Compound kargon.	Toris root comp.
Compound fluid balmwort.	Marmola.
Tr. cadonienne concentrolia.	

Some of these are not unknown in the British Isles.

BUSINESS HONESTY.—A measure of great importance has just been introduced into the National Congress at Washington. It is intended to do for all sorts of merchandise what the Food and Drugs Act does for articles within its jurisdiction—enforce standards of honest labelling, branding, and advertising. This Hull Bill is similar to the Merchandise Marks Act of Great Britain. The measure grew out of the new era of honest labelling inaugurated by the Food and Drugs Act three years ago, and incidentally it contains several provisions which have in the meantime been urged as necessary amendments to the food and drug law. Effort is made to reach misrepresentation in advertising by declaring that a product so advertised shall be considered misbranded, but this provision of the Bill is of doubtful constitutionality.

TARIFF REVISION.—What alterations in the tariff some sections of the drug and chemical trade would like to see made are mentioned in the "American Druggist" as having been filed with the Ways and Means Committee. The Schaefer Alkaloid Works, Maywood, N.J., ask for an increase of duty on caffeine to \$1.25 per lb., in case benzol and toluol are made dutiable. The W. H. Bowdlear Co. ask for a duty on ceresine, but desire to have ozokerite free of duty. The Citrus Protective League, California, ask for a duty on citrate of lime of 5 cents per lb., with 30 cents per lb. on lemon oil. The Mallinckrodt Chemical Works, St. Louis, Mo., and the Schaefer Alkaloid Works ask for a duty of \$3 per oz. on cocaine and on some ecgonine derivatives. Barry Mohun, Washington, has filed a brief asking for a duty of a quarter of a cent per lb. on cocoanut oil, while the India Refining Co. and the Nucoo Butter Co. protest against any duty on such oil. Scott & Bowne ask a reduction on cod-liver oil from 15 cents per gallon to 10 cents. J. E. Athanassiades & Sons recommend a reduction of the duty on olive oil to 20 cents per gallon when imported in bulk, with 30 cents per gallon when imported in bottles, jars, etc. They also recommend the reduction of the duty on castile soap by $\frac{1}{2}$ cent a lb.

Japanese Jottings.

(From the "C. & D." Correspondent.)

"THE MODEL PHARMACEUTICAL ESTABLISHMENT," which has been started by some Osaka druggists with capital of 70,000*l.*, will begin business in January.

G.P.H.—Fourteen persons graduated last term from the Kanazawa Medical College (Pharmaceutical course), and were granted permission to use the letters "G.Ph." after their names.

MESSRS. G. HONDA AND M. OKUM have been attached to the Tokyo University for the purpose of undertaking researches in problems connected with manufacturing and pharmaceutical chemistry.

THE ANNUAL DINNER of the Tokyo, Kyoto, and Osaka druggists took place at Hamadera Park, near Osaka, on October 21. Many well-known druggists of Osaka, Kyoto, and Tokyo were present.

MR. H. E. MIYAO, Director of the Japan Camphor Monopoly Bureau, has left for Europe and America, where he intends investigating the extent and prospects of the artificial-camphor industry.

MR. C. TAKEDA, wholesale druggist, Osaka, has added a chemical laboratory to his pharmaceutical establishment. He is stated to be the first wholesale druggist in Japan to add the manufacture of chemicals to that of galenicals.

MR. N. INONE, who in 1896 studied at the Wisconsin Pharmaceutical College, United States, and obtained the magister of pharmacy degree, his thesis being on "Japanese Peppermint," is to open a pharmacy in Chicago. He has been taking a holiday in his native land.

COUNT OHGIMACHI, an influential member of the House of Peers, who is closely connected with pharmaceutical circles in Japan, and is Hon. President of the Pharmaceutical Society of Japan, has been appointed Chairman of the Japanese and Korean Commissioners for the Oriental Colonisation Co.

THE JAPAN CHEMICAL INDUSTRY Co., of Tokyo, has been commissioned by the Minister of Commerce and Agriculture to undertake the manufacture of electrolytic potassium chlorate. This company has supplied the War Office with large quantities of iodine compounds, potassium sulphate, saltpetre, hydrochloric acid, etc.

OPIUM-SMOKING IN FORMOSA.—It may not be generally known that in her efforts to prohibit the use of opium China copied the example of Japan in Formosa during 1897, when all imports of opium, except by the Government, were prohibited, as was also possession of the drug except by those who would have died if denied opium to smoke. The licensed smokers in Formosa numbered 169,064 in the year 1900, and in April of this year they totalled 126,040, corresponding to 34.12 per cent. of the whole population of Formosa. The admixture of harmless ingredients with the drug is being increased with a view to lessen its effect on opium-smokers. [The imports of opium into Formosa have meanwhile increased.—EDITOR, C. & D.]

TRADE-MARKS IN KOREA.—A difficulty has arisen, says the "Daily Telegraph," in connection with the negotiations between Great Britain and Japan for securing the protection of British patents and trade-marks in Korea. It concerns the question of extra-territoriality. In the convention recently concluded with the United States it was stipulated that the duty of enforcing the regulations with regard to patents and trade-marks should devolve upon the Japanese Residencies in Korea, but it is stated that the British authorities show some reluctance to endorse this procedure. Meantime, a significant instruction has been issued by Mr. Oshikawa, Japanese Vice-Minister of Agriculture and Commerce. He states that owing to the fierceness which competition has developed in matters of trade and industry, merchants think only of getting the better of one another, and manufacturers do not scruple to have recourse to adulteration and to abuse of patents and trade-marks. As to this last point, numerous complaints have been received from foreigners who have suffered from such abuses. These complaints may not have been invariably well founded, but many of them are certainly just.

Legal Reports.

High Court Case.

ELEPHANT TRADE-MARK.

THE case of the Grosvenor Chemical Co. v. James Greenfield (trading as Allardice & Co.), Belfast, was mentioned before the Master of the Rolls in the Dublin High Court on December 21. The case concerns the use of an elephant device as a trade-mark for soap. The defendant now stated that he was prepared to submit to an injunction, and the Master of the Rolls allowed the case to stand pending the making-up of the consent order.

Merchandise-marks Act.

COPAL FOR AMBER.

AT the Marlborough Street Police Court on December 30, before Mr. Denman, L. Ashenfarb, Christopher Street, Finsbury Square, E.C., was summoned at the instance of Mr. Jacobson, of Königsberg, Germany, on behalf of the Royal Amber-works, Königsberg, for selling copal with a false trade description, and with applying a false trade description to an article. It was stated in the course of the hearing that the copal was sold to Mr. J. S. Weingott, pipe-manufacturer, Glasshouse Street, as amber at 4l. per kilo. Mr. Weingott explained in the witness-box that amber is the fossilised resin of a tree now extinct, and in Germany the Government (for which he appeared as a witness) hold the monopoly of its production. The copal had apparently been "cooked" under high steam-pressure, after which an artificial crust had been put upon it making it a marvellous imitation of the real article. The defendant handed up invoices to the Magistrate showing that he had purchased material as "Elektron" at 3l. per kilo., and said that believing it to be amber he sold it as such. Mr. Denman said that beyond question the defendant sold for amber a substance which was not amber, and the uncontradicted evidence was that it was copal gum, worth about fivepence a pound. No doubt a person in Vienna, as shown by the invoices, and the defendant were mixed up in the sale of this fraudulent amber. A fine of 10l., with five guineas costs, was imposed, with the alternative, in default of payment, of a month's imprisonment.

Weights and Measures Act.

UNSTAMPED MEASURES.

AT Loughborough on December 23, Bert Mills, described as a chemist, of Shepshed, was summoned for using unstamped measures, and explained to the magistrates that he did not use some of the measures for trade at all, whilst as for some of the small ones they could be bought new cheaper than the cost of stamping. The Bench held that as some of the measures had marked on them "imperial pint" there must be a conviction, and imposed a fine of 7s. 6d.

Sale of Food and Drugs Acts.

A PRESCRIPTION-TEST.

AT Wallsend-on-Tyne on December 29, John Morris, chemist, Willington Quay, was summoned, under Section 7 of the 1875 Act, for selling a compounded drug not in accordance with the purchaser's demand.

Detective Moody stated that on November 20 he took a prescription to defendant and received a compound in a bottle. A sample had been sent to be analysed, and had been returned certified as being 7.95 per cent. deficient in potassium iodide. In answer to the Mayor (Mr. R. I. Dees), witness said that he wrote the prescription himself.

The Mayor (after conferring with Dr. Aitchison, one of the Magistrates on the bench): The doctor says a compound from the prescription would poison those who took it.

Dr. Aitchison: I don't quite say that.

Defendant said that he had been in business twenty-five years, and his drugs had often been tested, and nothing wrong discovered. These little home remedies required careful consideration, or everyone in the place might be poisoned.

Defendant was ordered to pay the costs, 18s., and the Clerk (Mr. T. Y. Bramwell) remarked, "That means there is no conviction."

County Court Case.

A DENTAL CASE.

AT the Glasgow Sheriff's Court on December 28, Sheriff Glegg heard counsel in an action brought by Miss Dickson, Airdrie, against the Hygienic Teeth Institute, Coatbridge and Glasgow, for damages, laid at 50l., in respect of the defenders' alleged fault and negligence in the course of extracting her teeth. The discussion was chiefly upon the contract entered into on November 30, 1907, and contained in an agreement and letter. Defenders' counsel pointed out that the statement made on behalf of pursuer that the defenders represented themselves as "highly skilled" and "qualified dentists" was not contained in the contract, which was one to supply teeth. For the pursuer it was stated that the operations extended over fourteen months. It was further submitted that in a case of this kind, where dental operations are undertaken, skill must be shown, for the public are entitled to rely on some skill in the performance of the operations held out to them. His Lordship took the case to *avizandum*.

Deeds of Arrangement.

WORMULL, FREDERICK ALFRED STANLEY, trading as Evans & Wormull, 31 Stamford Street, Blackfriars, London, S.E., and residing at 51 Bargary Road, Catford, S.E., Surgical-instrument Dealer and Manufacturer. Trustee, G. E. Corfield, Balfour House, Finsbury Pavement, E.C. Dated December 19; filed December 24. Secured creditors, 4,900l.; liabilities unsecured, 3,318l.; estimated net assets, 6,923l. The following are among the creditors: T. Bailey (14l.); Coxeter & Son (38l.); Institute of Hygiene (12l.); Society of Apothecaries (16l.).

McKIE, ROBERT, 107 Sussex Road, Southport, Chemist and Druggist. Trustee, J. Jump, 42 Chapel Street, Southport. Dated December 21; filed December 24. Secured creditors, 200l.; liabilities unsecured, 582l.; estimated net assets, 274l. Assignment upon trust, etc., with a view to securing a composition of 10s. in the pound within three months from date hereof, provided same be secured within three weeks. The following are among the creditors: Ayrton, Saunders & Co., Ltd., Liverpool (51l.); Evans Sons Lescher & Webb, Ltd., Liverpool (110l.); R. Sumner & Co., Ltd., Liverpool (25l.); Oldfield, Pattinson & Co., Manchester (18l.), and J. Woolley, Sons & Co., Ltd., Manchester (13l.).

Gazette.

Partnerships Dissolved.

PRICKETT, G. F., and BROWN, T. W., dentists, Holborn Bars, London, E.C., under the style of George Prickett.

CARTEIGHE, J., and HICKES, C., dental surgeons, Holland Park Avenue, London, W., and East Sheen, under the style of Carteghe & Hickes.

SCHOFIELD J. W. (now deceased), and SCHOFIELD, S., mineral-water manufacturers, Liverpool, under the style of Schofield Brothers.

Trust Deed.

JAMES PARK, chemist and druggist, 167 Main Street, Bridge-ton, Glasgow, has granted a trust deed on behalf of his creditors in favour of Mr. G. D. Stirling, C.A., 186 St. Vincent Street, Glasgow.

New Companies and Company News.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907.

BRITISH ORGANIC NITROGEN CO. (1908), LTD. (P.C.).—Capital 5,000l. Objects: To carry on the business of manufacturers of and dealers in artificial manure, chemicals, disinfectants, etc. Registered office, 52 Piccadilly Street, Tunstall, Staffs.

JACK'S MINERAL WATER CO., LTD.—Capital 1,000l. Objects: To acquire the business of Jack's Mineral Water Co. The first directors are J. Young, F. W. Young, J. G. McClure, and W. F. Wright. Registered office, 11 Boyle Street, Belfast.

McARTHUR MARENTI VALONEA EXTRACT CO., LTD. (P.C.).—Capital 25,000l. The first directors are T. McArthur (chairman and managing director), C. Marenti, H. M. McArthur,

and G. E. Knowles. C. Marenti is managing director in Smyrna.

HUDSON'S EUMENTHOL CHEMICAL CO., LTD., has been registered in New South Wales with a capital of 20,000*l.* in 1*l.* shares. Objects: To carry on the business of manufacturing chemists and wholesale and retail druggists, etc. Registered office, Sydney.

CAMPBELL, JOHN, LTD.—Capital 8,000*l.* Objects: To acquire the business of J. Campbell, aerated-water manufacturer and wholesale confectioner. Perth. The first directors are J. Campbell, A. Campbell, and J. Campbell, jun. Registered office, Feus Road, Perth.

T. B. ALLKINS, LTD. (P.C.)—Capital 1,000*l.* Objects: To take over the business of a chemist and druggist carried on by T. B. Allkins at 33 Market Street, Tamworth. The first directors are T. B. Allkins (chairman) and T. L. Allkins. Registered office, 33 Market Street, Tamworth.

KATAKILLA, LTD. (P.C.)—Capital 500*l.* Objects: To carry on the business of manufacturers of and dealers in an insecticide known as "Katakilla." The first directors are H. H. Everett, C. Hose, E. J. Maher-Smith, and H. E. Durham. Registered office, 33 Gray's Inn Place, W.C.

W. B. CARTWRIGHT, LTD. (P.C.)—Capital 3,000*l.* Objects: To take over the business of W. B. Cartwright, compressed-tablet manufacturer, capsule-maker, and manufacturers'-agent, Leeds. The first directors are W. B. Cartwright (managing director), H. H. Tomlinson, and W. Cartwright. Registered office, 17 Burton Terrace, Dewsbury Road, Leeds.

SEED CRUSHERS' ASSOCIATION—Registered with an unlimited number of members, each liable for 2*l.* in the event of winding up, with objects as indicated by the title. The word "limited" is omitted from the title by licence of the Board of Trade. The management is vested in a Council. Registered by B. K. Barton, Crown Chambers, Land-off-Green-Ginger, Hull.

THOMAS, J. L., & Co., LTD. (P.C.)—Capital 50,000*l.* Objects: To take over the business of tallow melters, soap and candle makers, oil and colour men, stove and lamp dealers, and wholesale grocers' sundriesmen carried on by J. L. Thomas & Co., at Exeter and Bristol. J. L. Thomas and A. C. Thomas are the permanent governing directors. Registered office, 163 Fore Street, Exeter.

WALLACH BROS., LTD. (P.C.)—Capital 15,000*l.* Objects: To take over the business carried on by J. Wallach and L. C. Wallach, as Wallach Brothers, asbestos and rubber manufacturers and dealers, chemical merchants, dealers in proprietary articles and electrical, chemical, scientific, and photographic apparatus and materials, etc. The governing directors are J. Wallach and L. C. Wallach.

CAMBRIAN SUPPLY CO., LTD. (P.C.)—Capital 2,000*l.* Objects: To take over the business of W. Swinburn, Mold, Wrexham, and Ruabon, to secure purchasers for the goods of bona-fide shopkeepers, to finance shopkeepers, and generally to help shopkeepers to fight the competition of the credit trader, and to deal in boots, shoes, artificial teeth, etc. The first directors are W. Swinburn and I. Powell. Registered office, Cambrian Chambers, King Street, Mold, Flint.

EAST INDIAN TANNING EXTRACT CO., LTD. (P.C.)—Capital 6,000*l.* Objects: To take over the business carried on by the Tanners and Dyers' Extract Co., Ltd., at 87 West Regent Street, Glasgow, and at Raneeunge, India. The latter company are specially authorized to transfer to any member of the firm of J. Thomas & Co., of Glasgow, any of the shares allotted to them under the purchase agreement. The first directors are T. McArthur and S. Hoey.

WRIGHT & DUTTON, LTD. (P.C.)—Capital 6,000*l.* Objects: To take over the businesses of John Dutton, Ltd., aerated and mineral water manufacturers, Hastings Street, Chorlton-on-Medlock, and C. Wright, wine and spirit merchant, 2A Commercial Street and 65 Downing Street, Manchester, and 42 Great Underbank, Stockport. The first directors are C. Wright, G. O. Caine, H. L. Dawson, C. D. Gaunt, and T. Dutton. Registered office, 16 Hastings Street, Chorlton-on-Medlock.

MANBRÉ SACCHARINE CO., LTD.—The directors announce that they do not recommend the payment of a dividend on the preference shares at present.

J. H. CUFF, LTD., mineral-water manufacturers, Oswald Street, Manchester.—This company has gone into voluntary liquidation. The total liabilities amount to 28,054*l.* 16*s.* 5*d.*, and the estimated assets are 8,625*l.* The capital is 14,081*l.*, and the debentures total 10,000*l.*, while loans amount to 1,018*l.* The creditors include Apollinaris, Ltd., 56*l.* 15*s.*; Durafort et Fils, 135*l.*; Saccharin Corporation, Ltd., 10*l.* 10*s.*; Kilner Bros., Ltd., Dewsbury, 166*l.* 9*s.*; Manchester Chemical Co., Manchester, 14*l.* 17*s.*; Carbonic Acid Gas Co., Manchester, 17*l.* 4*s.*

PARKE'S DRUG-STORES, LTD.—The annual report of this company for the year ending September 30, 1908, recommends a final dividend of 3 per cent., less income-tax, making with the interim dividend 6 per cent. for the year. The profit and loss account shows a trading profit of 7,577*l.* 14*s.* 3*d.*, which with the balance from the previous year (321*l.* 0*s.* 1*d.*) and interest on investments (614*l.* 17*s.*) makes a total credit of 8,513*l.* 11*s.* 4*d.* Against this are expenses 4,060*l.* 10*s.* 2*d.*, and repairs 726*l.* 5*s.* 7*d.*, leaving a balance of 3,726*l.* 15*s.* 7*d.* The interim dividend has already absorbed 2,111*l.* 3*s.* 8*d.*, and 418*l.* 15*s.* is to be applied to fixtures, depreciation, and reserve fund, and 400*l.* to stock reserve fund. The distribution of the final dividend will necessitate 1,400*l.* being taken from the general reserve fund, and a balance of 50*l.* 7*s.* 1*d.*, will be carried forward. The assets in the balance-sheet include goodwill account 12,150*l.* 12*s.* 3*d.*, stock 42,623*l.* 13*s.* 3*d.*, plant, fixtures, and fittings, 33,563*l.* 13*s.* Mr. A. Chatto and Mr. J. F. Fuerst, the retiring directors, offer themselves for re-election. The annual meeting was held on December 31.

MORTGAGES AND CHARGES.—The following have been filed: *Hillcrest Oil Co. (Bradford), Ltd.*, mortgage to J. Corson, Saville Street, Leeds, securing 2,000*l.*—*Charles Massey & Son, Ltd.*, chemical manufacturers, Newcastle-under-Lyme and Manchester. Debentures 100*l.*, part of a series of which 12,300*l.* has previously been issued.—*South Atlantic Trading Co., Ltd.*, guano merchants, etc. Mortgage debenture for 3,650*l.* to T. C. Kerry, Royal Colonial Institute, Northumberland Avenue, W.C.—*T. H. Walton & Co., Ltd.*, chemists, Cleckheaton. Debenture for 200*l.* to R. A. Vinter, chartered accountant, Bradford.—*W. Watson & Sons, Ltd.*, photographic-apparatus makers, etc., London. Debentures 400*l.*, part of 12,000*l.*, of which 8,100*l.* has been previously issued.—A memorandum of satisfaction in full (a) of charge on debts, dated June 26, 1908, securing 5,000*l.*, and (b) of 2,750*l.* debentures and 10,000*l.* mortgage debenture stock lodged and issued as collateral security to above charge, has been filed by *Odams' Manure and Chemical Co., Ltd.*, London and Topham, near Exeter.

Personalities.

MISS L. S. TAYLOR, chemist and druggist, has obtained the post of dispenser to the Bolton Guardians.

MISS C. F. SHELDON, chemist and druggist, has been appointed as dispenser by the Kingston (Surrey) Guardians.

MR. A. J. OGSTON, British Vice-Consul at Messina, whose reports on the Sicilian citrate industry have been alluded to in this journal from time to time, was severely hurt in the Messina earthquake, and was taken to the Palermo hospital. Mr. Ogston's wife is among the dead.

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

MR. BANNER has opened a drug-store at 50 London Road, Grantham.

MESSRS. HENDERSON BROS., LTD., manufacturers and importers of druggists' and perfumers' sundries, have removed from 4 City Road to Compton House, Upper Street, London, N.

MR. R. HAYTON DAVIS, Ph.C., Harrogate, informs us that his removal to adjoining and more convenient premises was made in the beginning of December 1907, not last month, as a paragraph on p. 975 seemed to infer.

MR. T. G. HEIGHINGTON, formerly manager of the drug-department of Harrod's Stores, has been appointed Superintendent of the drug-department of Messrs. Selfridge's, Ltd., new stores in Oxford Street, W., and is now placing orders for the opening in March.

MR. PERCY J. ASHFIELD, chemist and druggist, has repurchased the business of Messrs. Ashfield & Co., at 66 High Street, Rhyl, which he relinquished some time ago owing to ill-health. During his ten-years' residence in the town Mr. Ashfield has been Finance Secretary to the National Eisteddfod and Hon. Secretary of the local Advertising Committee, an institution which he founded. He also started the Rhyl Amateur Dramatic Society, and he is a member of the Town Council. In recognition of his public services Mr. Ashfield was presented with a solid silver salver a few years ago.

Births.

BINGHAM.—At 19 Ashley Avenue, Belfast, on December 26, the wife of J. A. Bingham, pharmaceutical chemist, (The Central Pharmacy, Donegall Place, of a son.

GIBSON.—At St. Oswald's Road, Hexham, on December 20, the wife of John Gibson, F.C.S., F.S.M.C., F.I.O., chemist and optician, of a son.

MARSDEN.—At 24 Hawarden Avenue, Liverpool, on December 27, the wife of Prosper H. Marsden, lecturer in materia medica and pharmacy in the University of Liverpool, of a daughter.

Marriages.

ATTENBOROUGH—HAZART.—At Brixton, on December 23, by special licence, Thomas Winfield Attenborough, pharmaceutical chemist, to Gabrielle du Mesnil, only daughter of M. Camille Hazart, pharmacien, St. Heliers.

LARMOUR—SAVORY.—At Holy Trinity Church, Brompton, on December 21, by the Right Rev. the Bishop of Barking (great-uncle of the bride), assisted by the Rev. Prebendary Gough, Lewis C. Larmour, R.G.A., to Evelyn Beryl, youngest daughter of Mr. Arthur L. Savory, of 31 Bramham Gardens, S.W.

SHEWELL—GEORGE.—At the Wesleyan Church, Southwell, Notts, on December 29, Charles Frederick Shewell, chemist and druggist, Aylesbury, to Nellie Emmeline, only daughter of Mr. Walter George, Southwell.

TANNER—PRICE.—At Hanley Square Wesleyan Church, Margate, on December 26, William Edward Tanner, chemist, 36 Station Road, Chingford, to Ethel, daughter of Mr. James Price, 10 Queen Street, Margate.

Deaths.

BLYTH.—At West Croydon, on December 15, Mr. Utton Blyth, chemist and druggist.

BOTTLE.—At New Cavendish Street, London, on December 22, Alexander Bottle, M.D., aged sixty-seven, son of the late Alexander Bottle, J.P., of Dover.

GAMMIDGE.—At 40 Lower Hastings Street, Leicester, Mary, widow of Mr. Samuel Gammidge, chemist, Leicester, aged seventy-four.

GORE.—The death occurred last week, in his eighty-third year, of Mr. George Gore, F.R.S., LL.D., who was formerly lecturer in chemical and physical science at King Edward's School, Birmingham. Dr. Gore was a self-taught and self-trained man. He was born at Bristol on January 22, 1826, and became an ardent student and experimenter in electricity and magnetism. Fifty-five years ago he contributed a series of papers to the "Pharmaceutical Journal" on electro-deposition, and became an authority on electro-metallurgy. He was granted a Civil List pension in 1891.

JONES.—At Flint, Mr. Owen Williams Jones, chemist and druggist, 30 Church Street, Flint. Mr. Jones was an Overseer of the Poor for twenty-two years, and a deacon and secretary of the English Presbyterian Church at Flint for about thirty years.

LOCKWOOD.—On December 22, Mr. Ben Lockwood, chemist and druggist (formerly in business at Market Street, Milnsbridge, Huddersfield), aged fifty.

WOODEND.—At 13 St. James Street, Liverpool, on December 26, after a short illness, Mr. James Woodhead, chemist and druggist.

SWEDEN'S chemical industries were not particularly prosperous in 1907 owing in great measure to the enhanced prices of raw materials, and even when these prices fell full advantage could not be taken of the opportunity owing to the high rate of discount. In 1907 there were imported into Sweden 775 tons of colours—alizarine, aniline, and others made of tar—2,585 tons of caustic potash, 25,853 tons of Chilian saltpetre, 15,673 tons of syrup and molasses, and 4,546 tons of superphosphates. In like manner Sweden exported 13,753 tons of superphosphates. The cellulose-market was also very satisfactory during 1907.

Trade Notes.

MESSRS. SANGERS, 258 Euston Road, London, N.W., will keep their showroom and waiting-orders department open until 6 P.M., instead of 5 P.M., after January 1.

MR. HERRICK E. JACKSON, 21 Abercromby Place, Stirling, will from January 1 represent Messrs. Ayrton, Saunders & Kemp, Ltd., of Liverpool, in Scotland.

THE ALLIANCE DRUG AND CHEMICAL Co., 34 Leadenhall Street, London, E.C., have brought out a new edition of the detailed price-list which we referred to six months ago. It has been revised, but the company's advertisement in the *C. & D.* should be consulted for alterations.

DAY'S "OIL OF THE NIGHT" is to be prominently in the public eye this year, as Messrs. Day & Sons, Ltd., of Crewe, the manufacturers of the oil, are entering upon a large advertising campaign. Retailers should, in consequence, be prepared to meet the demand which is sure to arise, and they will find in the company's advertisement on the cover of this issue particulars of the matter.

KAY'S SPECIALITIES.—The various proprietary medicines made by Messrs. Kay Brothers, Ltd., Stockport, have been placed on the P.A.T.A. list as from December 1, 1908. A list of minimum prices of Linseed Compound, Kay's Tic-pills, Mountain Flax pills, and Kay's Throat-lozenges is given in an announcement by the company in the advertisement pages of this number.

LITTLE LIVER PILLS.—Messrs. Arthur H. Cox & Co., Ltd., Brighton, announce this week a reduction in the price of their little liver pills, which are now 15s. per gross of tubes each containing forty of the coated pills. They are labelled with the chemist's own name and nicely wrapped. There are sixteen styles of labels to select from, and any chemist who has not yet taken advantage of this bargain should write to Messrs. Cox for a sample tube.

B. D. H.—The origin of the title of the British Drug-houses, Ltd., is clearly shown in the advertisement of the company in this issue. From this it will be seen that the initials B. D. H. are the first letters of the three companies who have joined forces from the beginning of the year. The advertisement further shows the genealogy of one of the component companies. We gather that each branch for the present will be carried on separately and distinctly, so that customers will find no change in relationship to the houses they have been dealing with.

CALENDARS.—Messrs. Potter & Clarke, Ltd., Artillery Lane, London, E., have issued a chastely designed card, 9 in. by 7 in., in the centre of which are monthly tear-offs. —**MR. J. D. PETRIE**, of Blairgowrie, has presented his customers with a miniature calendar bearing an attractive portrait of "Faustine." —The calendar issued by Mr. G. B. Wright, chemist and optician, Hebden Bridge, measures 10 in. by 6½ in., and within a gold and floral border the days of the month are printed blue, thus leaving the figures white and distinctive. There is a page for each month, and the last sheet is devoted to the whole year's calendar.

"THE SCIENTISTS' POCKET-BOOK AND DIARY, 1909."—Messrs. James Woolley, Sons & Co., Ltd., Victoria Bridge, Manchester, appear not to be content with the excellence which they have hitherto attained in the production of this convenient annual. This year, in addition to the concise and explicit definitions and explanations of scientific facts and principles which are comprised in the reference pages, there are included weekly pages printed on architects' or designers' ruled paper, with spaces for daily engagements of the working days, and the greater part of the page reserved for notes. It is published at 1s., and is a suitable pocket-book for analytical and other chemists, electricians, engineers, and physicists.

PRICE OF SACCHARIN.—The Saccharin Corporation Ltd., 165 Queen Victoria Street, London, E.C., are sending out a circular to correct an impression that the price of saccharin will be reduced in 1909. The misapprehension, they believe, is due to the circulation of reports that owing to the expiry of the Monnet patent the Corporation will no longer be able to control the manufacture and sale of saccharin in the United Kingdom. The circular states that the object of the Monnet patent is not to make

saccharin, but that patent relates to an economical alternative process for making toluene sulpho-chloride, one of the raw materials from which saccharin is made. The manufacture of saccharin from this raw material is protected by several patents which belong to the Corporation, and none of these will expire for some years to come.

MESSRS. P. BEIERSDORF & Co., medical-plaster manufacturers, etc., Hamburg, and 7 and 8 Idol Lane, London, E.C., have issued an artistically printed and illustrated price-list for 1909. It includes glycerin jellies (prepared according to Professor Unna's prescriptions), casein ointments, a complete series of plasters, guttaplasts, cornings, paraplaster, tricoplasts, salvemulls, super-fatted medicated soaps and "Pebecol" tooth-paste. Apart from the utility of the catalogue as a price-list, it should be serviceable to chemists and other dispensers owing to the list of medications, such as salvemulls, which it contains, showing the strengths and compounds obtainable. Most of the styles in which the articles are packed are illustrated and sizes are given in yards and inches. Any chemist may obtain a copy of the catalogue on application to the London office.

THE BARRON HARVEYS & Co. branch of British Drug Houses, Ltd., 6 Giltspur Street, London, E.C., have been accustomed during the past few years to issue a calendar for hanging up in the shop or office, each page of which provides for a month, and therefore forms a calendar of important engagements for 1909. The Giltspur Street house have this year excelled all previous efforts by providing an improved "hang-up." Each page contains hints to buyers, and the firm manage in the course of the year to give users a good working idea of the varied departments in which the house specialises, and by the time one reaches December 1909 one finds that the lease of Messrs. Barron Harveys & Co.'s premises expires on Christmas Day, and on December 28, 1909, their only address will be Graham Street, Finsbury, London, N. The calendar has a stiff cardboard cover, the greater part of which removes, and one finds inside it Sir Dyce Duckworth's remarks about cheap drugs, printed in such a way that the chemist can use it as a counter showcard.

MARTINDALE'S LIST.—The first issue for the New Year of the price-list of W. Martindale, manufacturing chemist, 10 New Cavendish Street, London, W., has been revised in accordance with the latest edition of the "Extra Pharmacopœia," and is consequently a complete record of the medicinal agents employed at the present time. It is really astonishing to note the comprehensiveness of the list, including, as it does, in the 200 pages medicines from the older galenicals to the most recent new remedy, druggists' sundries, and prices for various analytical investigations. Taking up the list, we open it at p. 119, and here strike upon the newest information regarding the treatment of intestinal complaints by means of the lactic-acid bacillus. Mr. Martindale puts up a mixture of three organisms (Günther's bacillus, *B. caucasicum*, and Hüppe's bacillus) under the name of trilactine, which is employed in the form of liquid or tablets for preparing curdled milk, or the ready-prepared milk is supplied where preferred. On the next page we note particulars regarding tylosin and tylmarin—the former an acetyl-arsanilate used in trypanosomiasis, and the latter a coumaric compound which is employed in conjunction with sodium cinnamate and sodium coumarate in the treatment of malignant diseases. There is a complete list of vaccines of the Wimpole Institute, which is of great service for reference, in view of the growing tendency which medical men have in favour of the vaccine method of combating disease. We have mentioned the completeness of the list and given examples of the contents which we think will sufficiently justify chemists in sending for a copy, if they have not already received one. It should be added that there is a detachable trade-discount list, so that the catalogue can be shown to medical men.

BARCELONA EXPORTS.—The following were among the exports from Barcelona in 1907: Chemical products, 6,133 tons (1906 2,725 tons, 1905 2,825 tons); pharmaceutical products, 133 tons; perfumery and essential oils, 20 tons (1906 25 tons, 1905 32 tons); saffron, aniseed, etc., 303 tons (1906 249 tons, 1905 326 tons); wax and stearine, 429 tons (1906 322 tons, 1905 621 tons).

Muscarine-poisoning.

AT the Dale Street Police Buildings, Liverpool, on December 23, the Liverpool Coroner (Mr. T. E. Sampson) investigated the circumstances attending the death of Mr. Owen H. Gilman (33), shipowner's manager, Walton. Mr. E. McGowan represented the widow, and Mr. F. R. Martin watched the inquiry on behalf of Mr. Marples, chemist, Liverpool. The first witness was Mrs. Helen E. Gilman, widow of deceased, who stated in her evidence that when going for their annual holiday to Wales, in September, her husband took with him a small bottle of liniment for gnat-bites, which he used for several nights until relieved from the discomfort of the bites. After that, so far as she knew, he did not use the liniment.—Dr. Baker Young deposed to attending deceased at the commencement of the illness at the end of October. Dr. Young and his brother-consultants eventually came to the decision that the case was one of peripheral neuritis. The wall-paper was tested for arsenic and some essence was examined bacteriologically. Deceased told him he had used the liniment, applying it one night and then next morning he would scratch the part and a scab would form. He would then remove the scab and apply liniment again.—Sir James Barr deposed that when he first saw Mr. Gilman on December 6 he was suffering from marked multiple neuritis, but he seemed a puzzle, as the principal causes (lead, arsenic, and alcohol) had been eliminated. The symptoms of respiratory paralysis, inability to swallow, and dilated heart undoubtedly pointed to muscarine-poisoning, such as usually arose from eating poisonous mushrooms, but that also was excluded. He was of opinion that deceased died from muscarine-poisoning, and he certainly thought deceased had applied the liniment more recently than two months ago, as otherwise he would not expect to find the effect so late as December.—Mrs. Gilman, on being recalled, was confident that her husband had not used the liniment after he came home.—A question as to whether the bottle before the Coroner was the one supplied to Mr. Gilman having been settled, Mr. Benjamin Moore, Professor of Biological Chemistry at the Liverpool University, gave the result of his investigations. No arsenic or antimony or any inorganic poison affecting the peripheral nervous system had been found, nor did microscopic examination show any abnormality in the organs. The two bottles supplied consisted chiefly of an alcoholic solution of soap which contained a small amount of muscarine. The symptoms of muscarine-poisoning would be paralysis of the limbs, followed by that of the respiratory muscles, and death from the latter cause. Great pallor, salivation, and perspiration would also occur. The case they were inquiring into was unique, but Professor Moore stated that the knowledge of experts on the subject was that muscarine acts more potently through the skin than through the stomach. The symptoms described by Sir James Barr coincided with those of muscarine-poisoning. He should say the quantity of liniment absent from the bottle when received would constitute a dangerous dose if used all at once, but he would not like to speak with regard to its use in separate applications.—Dr. Nathan Raw, who conducted the *post-mortem* examination with Drs. Abram and Young, stated that there was considerable congestion of the heart, lungs, and intestines. He could not say the condition of the organs was consistent with the absorption of toxic poison from the liniment.—Dr. Alfred E. Hawkes, of the Hahnemann Hospital, said he had used *Agaricus Muscarius* for thirty or forty years as an internal remedy, as much as 200 drops of the tincture being given without any permanent ill-effect. In one experiment $\frac{1}{2}$ grain of the alkaloid was given, and no nervous symptoms appeared.—The Coroner then addressed the jury, who, after retiring for ten minutes, returned a verdict of death from misadventure brought about by muscarine-poisoning. They expressed the opinion that the bottles of the liniment should be labelled "Poison," a precaution which the Coroner had already suggested.

SCIO EXPORTS.—Among the exports from Scio last year were 41,000*l.* worth of mastich to Austria-Hungary, France, and Egypt, and aniseed to Bulgaria, Roumania, and Turkey, valued at 3,200*l.*

Seasonable Publications.

Mr. F. B. Bennett, chemist and optician, 37 King Street, Whitehaven, publishes an almanac and tide-table for 1909. The literary matter is interesting and the illustrations attractive. Advertisements of other local traders are inserted, and there is a picture of the exterior of Mr. Bennett's shop on the front cover.

Mr. A. S. Galloway, chemist, 43 Nantwich Road, Crewe, prints 10,000 copies of his 1909 price-list and makes the advertisements pay the whole of the expense of compiling and printing. The list, in three sections, is comprehensive, and extra space is devoted to specialties. Mr. Galloway has another pharmacy at Blackpool.

Those who have a fancy for weather predictions should invest 2d. in a copy of the British Astronomical Weather-almanac and Chart for 1909. The author, Mr. B. G. Jenkins, F.R.A.S., has devised an ingenious system of forecasting the weather which is developed in this almanac. It is published by R. Morgan, 65 Westow Street, Norwood, S.E.

The almanac published by Messrs. Hart & Co., 7 Sadler Gate, Derby, includes medical notes for human beings and veterinary notes for cattle. Messrs. Hart specialise in horse and cattle remedies, and one section is devoted to their specialties in this department. There is a readable series of articles on the hills and dales of Derbyshire which should make the almanac more appreciated.

Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

Precipitated Silica.—Henry Le Chatelier has communicated a paper to the Paris Academy of Sciences on hydrated forms of silica. His experiments with gelatinous silica tend to prove that silica exists always in the anhydrous state. The passage through filters is not due to the solubility of anhydrous silica or the presence of a soluble hydrate, but is due to its extremely fine state of division. In confirmation of this it was found that silica jelly can be used for polishing metal surfaces.

Phosphorus and Phosphorescence.—Leon and Eugène Block state that the phosphorescence may be separated from phosphorus by means of a current of gas. A perfectly dark space is formed between the two, and any slight phosphorescence of the phosphorus itself is extinguished on increasing the flow of gas. The experiments show that the luminous phenomenon is not produced directly by oxidation of the phosphorus itself, but by an emanation from it, probably phosphorous anhydride. The phosphorescence, ionisation, and formation of ozone all take place in the same zone, and are due to the oxidation of oxide of phosphorus, and not the element.

Livetin is the name suggested by R. H. A. Plimmer ("Trans. Ch. Soc.," 1908, 1500) for a second protein found in addition to vitellin in egg-yolk. It contains 0.1 per cent. of phosphorus, and is soluble in water and coagulable by heat, in contradistinction to vitellin with 1.0 per cent. of phosphorus, which is insoluble in water. To prepare the new protein the yolks, after treatment with ether, are extracted with a large volume of water. The aqueous extract is then heated to boiling in the presence of a small quantity of acetic acid. A purer form of the protein is obtained by dissolving the yolk in 10-per-cent. sodium-chloride solution, extracting with ether, and then precipitating the vitellin with the addition of 20 volumes of water; the separated mother-liquid yields the protein on boiling.

Oleuropéine.—Em. Bourquelot and J. Ventilescio describe a new glucoside isolated from *Olea europæa* ("Journ. de Pharm. et Chem.," 1908, 7, 303). It exists in the bark, leaf, and fruit, varying according to season and in the different members of the fresh plant, and the experience of the authors is that on drying the glucosides are entirely decomposed, or at least in part. The greatest amount is contained in the cultivated fruit collected at the end of July, and it tends to disappear at the period of ripening, the end of November. Oleuropéine is a light-yellowish powder, slightly hygroscopic, readily soluble in water and hot alcohol, and insoluble in ether. Rotatory power about $[\alpha] -127^\circ$. The aqueous solutions are coloured yellow by alkalis, blood-red by concentrated sulphuric acid, while with dilute ferric-chloride solu-

tion a green colouration is obtained. It is not quite completely precipitated by lead subacetate, and is hydrolysable by means of emulsin. The sugar produced by hydrolysis of the glucoside is shown after isolation to be glucose.

The Rate of Alcoholic Fermentation.—Arthur Sclator, Ph.D., D.Sc., stated in a communication to the British Association meeting at Dublin that the transformation of glucose into alcohol and carbon dioxide by the action of yeast is probably not a single chemical reaction but a series of reactions, and the velocity of the transformation is determined by the rate of the slowest reaction. Evidence was brought forward to show that the initial rate of fermentation by living yeast is controlled almost completely by one single reaction. The rate of fermentation is exactly proportional to the amount of yeast present. It is possible that there exist three different enzymes: glucosylase, which ferments glucose and fructose; galactosylase, which ferments galactose; and mannosylase, which ferments mannose. It is probable that no compound has yet been isolated which can be considered intermediate in alcoholic fermentation. Fermentation by yeast-juice differs in many respects from that by living yeast: the mechanism of the reaction is probably the same in each case, but the relative rates of the different steps are different.

Valuation of Coca-leaves.—De Jong ("Teysmannia," 1908, 19,510) in 1905 published a modification of Keller's process for the estimation of the total alkaloids in coca-leaves, and subsequently it was suggested that the results were too high, and should be corrected by multiplying by 0.96. He has now compared the results obtained by his process with the total alkaloid as obtained by extraction (a) with ether and (b) with light petroleum, and finds that the three sets show good concordance, and that if his process be rigidly adhered to no correction is necessary. The process is, briefly, as follows:

Finely powdered leaves (12.5 grams) are mixed with 5 c.c. of ammonia solution (25 per cent.) and extracted in a Soxhlet apparatus with light petroleum for ten to fifteen hours. The petroleum extract is poured into a separating funnel, and the extraction of the leaves continued with a fresh quantity of the solvent for about three hours, or until no more alkaloid is taken out. The exhaustion of the powdered coca-leaves is indicated by the absence of turbidity when ammonia solution is added to the liquid obtained by shaking the last portions of the menstruum with dilute acid. The united petroleum liquors are extracted first with 50 c.c. of 0.5-per-cent. hydrochloric acid and then with 25 c.c., any emulsion formed being broken up by a current of air. The acid extract is filtered and the filter washed twice with water, the washings being added to the filtrate, which is washed once with ether. Alkali is then added, and the liberated alkaloids taken up with ether. The ethereal solution, with all the usual precautions, is then run into a tared flask, the solvent evaporated off by warming and blowing in air, and the residue finally dried in a desiccator, and weighed.

Recent Wills.

The dates in parentheses refer to the issue of "The Chemist and Druggist" in which the deaths of the testators were reported.

MR. JAMES TAYLOR, dispenser, Bolton, Lancs. (December 12, 1908, p. 889), left estate valued at 916*l.* 5*s.* 7*d.* gross, and at 633*l.* 8*s.* 1*d.* net.

MR. JOHN HORSLEY WILKINSON, chemist and druggist, Colne, Lancs., medical officer of health (November 15, 1908, p. 821), left estate valued at 1,380*l.* 15*s.* 1*d.* gross, of which 1,244*l.* 0*s.* 10*d.* is net personalty.

MR. SAMUEL FEAVER, retired chemist and druggist, Truro (November 28, p. 820), left estate of the gross value of 6,730*l.* 0*s.* 10*d.*, of which the net personalty has been sworn at 6,680*l.* 4*s.* 3*d.* Probate of his will, dated February 1900, has been granted to his daughter, Miss Elizabeth Feaver, and his son, Mr. Henry Wm. Feaver, chemist, both of Truro.

MR. WILLIAM HENRY FASSETT, of the firm of Messrs. Fassett & Johnson, of 31 and 32 Snow Hill, E.C., drug and medicine merchants and agents (September 26, 1908, p. 512), left estate of the gross value of 15,051*l.* 15*s.* 7*d.*, of which the net personalty has been sworn at 14,889*l.* 2*s.* 4*d.* Probate of his will, dated October 31, 1907, has been granted to his widow, Mrs. Isabel Fassett, of 10 Canfield Gardens, Hampstead, the sole executrix, to whom he left the whole of his property absolutely.

MR. KARL HERMANN POTHS, Frieberg, Baden, founder of the firm of Messrs. H. Poths & Co., of London, druggists' sundriesmen, formerly of Stuttgart (May 23, 1908, p. 801), left estate in the United Kingdom valued at 557*l.* 15*s.* Letters of administration have been granted to Mr. Herbert Walter Nelson, of 29 Great St. Helens, London, solicitor, as attorney for the testator's widow, Mrs. A. P. S. Poths, the residuary legatee.

Observations and Reflections.

By "Xrayser."

Business-building

is an attractive theme, and it is dealt with in the new *C. & D. Diary* suggestively and usefully. The value of articles of that kind lies not only in the direct advice they contain, but as much, and perhaps more, in the stimulus they provide for consideration of a subject of no small importance to those to whom they are specially addressed. A chemist who studies the propositions laid down and arrives at conclusions exactly opposite to those which the writer himself draws, will by no means have wasted his time. My own first impulse was to challenge what I think may fairly be regarded as the unproved premiss on which Mr. Russell bases his remarks—namely, that businesses have to be built, and can be built. The overwhelming proportion of the businesses of the nation do not require any building of the kind contemplated. Agriculture, shipping, railways, banking, mining, building, brewing, and most of the big manufactures are absolutely independent of arts and schemes devised to attract customers. Railway companies, shipping lines, whisky-makers, and others comprised in the list enumerated do in fact advertise the special advantages of their particular routes, conveyances, or brands, but what is done in this direction can have but an infinitesimal influence on the vast mass of the trades concerned. You will not make one extra journey between London and Manchester however amiable and intelligent the booking-clerk may be.

Retail Chemists

would be in a position analogous to the industries indicated if there were only just enough of us to meet the actual requirements of the public. In a large degree this is the condition of pharmacy in Germany and some other countries. One pharmacy is allocated to so much population; ten thousand, I think, is roughly the standard ratio in big cities. Our proportion of population is a good deal less than half of that which Germany reckons to be the normal. So long as this is so chemists' businesses will require to be built. Tonics, expectorants, digestives, purifiers, and influenza prophylactics will need to be seductively written up, and the ever-expanding series of accessories which we are pleased to consider come within our sphere of influence delicately brought to the notice of those who ought to want them. This is good for our own wits, and—with all respect for the socialistic theory, one of the blessings of which is to be the abandonment of all trade persuasion—often advantageous for the victims likewise. If everybody was intelligent, people would discover for themselves that when the cold weather set in they wanted hot-water bottles; under prevailing conditions a lot of them wait until we remind them of the necessity. On this particular item Mr. Russell has some capital remarks (p. 454). It is by the allusions to such examples that Mr. Russell's article is calculated to

Tempt the Unwary

but smart young pharmacist into the risky fancy that business-building is really a simple sort of achievement to one endowed, as he doubtless is, with a rather extra provision of skill and wit. Before this young gentleman rushes into the arms of the landlord and the rate-collector, however, let me sprinkle his enthusiasm with a few moist observations. First let him consider the prosperous businesses with which he is acquainted. If he knows their history he will probably realise that they have grown rather than been built. In most cases these successful concerns have

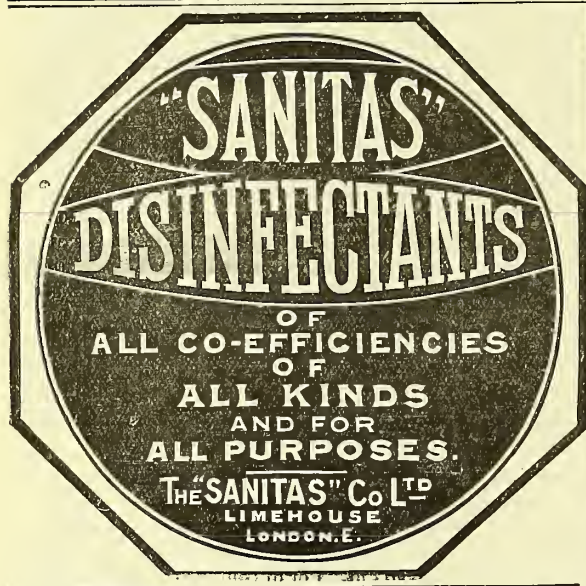
been well conducted, though perhaps from his point of view this can hardly be said of all of them. But they have all taken root; and though it is particularly easy to extend or develop one of these well-established businesses in some special direction, its substantial prosperity depends on the solid bulk of trade which seems to be inevitably connected with it. In a locality where a business cannot take root—where, in other words, it is not wanted—neither superior qualification, nor urbanity, nor skill in handling people will suffice to create one. This does not mean that the arts of attracting customers by advertisements, or of retaining them by discreet attention to their wants, and perhaps sometimes to their weaknesses, are of but little importance. On the contrary, they are of inestimable value. Without them the well-established business will often decay; with them that one which is promising to take root will be so strengthened as to assure its existence, and perhaps its ultimate high place, among historical pharmacies.

The Art of Advertising

is still, and probably always will be, mysterious. Whenever it is discovered how to spend a thousand pounds and be sure to get eleven hundred back the game will be played out. For of course everybody would elect to get his living that way, and it is not apparent where the margin is to come from to make all the world rich. Those who get at all behind the scenes in the advertising world are aware of the really astonishing amount of literary and artistic skill available to speculative firms, and pressed upon them with the most convincing evidences of the almost certain success of this or that particular method of securing publicity. Presumably this expert talent finds remunerative employment, and yet there is a considerable proportion of advertising which, as far as can be judged, accomplishes its purpose, but which "gets there" with a very economical expenditure of genius. Probably local advertising, with a well-stocked shop to back it, is rather less subject to luck and chance than the attempt to influence a nation or a world. But whether this takes the form of newspaper columns or circulars it must be continuous, and regular work must be put into it. Mr. Russell's advocacy of the "reason why" style of advertising comes in excellently here. But, in view of the suggestions which are floating about at this time to make the public understand what "pharmacist" means, or "what is a chemist," it may be advisable to recommend the qualified chemist not to spend any of his money on personal parade. The public will inevitably interpret claims of academic distinction as a thinly veiled excuse for higher prices. Much may be said in favour of

The Liberality Policy

which Mr. Russell cogently commends: no charge for a dark-room, the use of the weighing-machine free, a perfume-spray on the counter for the free use of servant-maids, a little dish of free cachous for the benefit of tipplers, with the object of bringing the "something-for-nothing" people to the shop and making them glad to be often there. It would be easy to extend this system of free trade indefinitely, and it would not be easy to assign a reason for stopping at any particular station. But it ought to be remembered that the "something-for-nothing" people are not as a rule the best to cultivate. They are not generally too responsive. You will only rarely get the mackerel back for which you ventured the sprat; and as soon as the next chemist appears in the neighbourhood they will be on the pounce to see what can be got from him. Meanwhile there are many other customers, large and small, the best sort you can have, who rather resent and suspect your liberalities. They prefer to pay for what they have than to be under any sort of obligation. They would much rather pay a penny to be weighed than have to say "Thank you" for the favour.



**WARRICK
BROTHERS.**

IF THE BUSINESS MAN • ONLY • KNEW •

how we can help him in the planning, writing, illustrating, producing, placing and distributing of his advertising matter—

HERE IS AN EXAMPLE—We received recently particulars (roughly translated from the Dutch) of a new speciality, with a request that they might be re-written by some one who knew, and turned into an effective circular. We wrote the fresh copy, and designed, laid out, and printed a business-bringing booklet. The whole work was carried out

- by our own staff—
- on the premises—
- with promptitude—

—to the customer's complete satisfaction—

WE CAN DO THE SAME FOR YOU TO-DAY.

W · H · SMITH & SON'S ADVERTISING AGENCY

H. E. MORGAN, CONTROLLER

—will help you as much or as little as you wish—
—place your advertisements only, or manage your campaign—
—return all commissions and charge for work done—

HELP IN MARKETING—The Name—The Trademark—The Package—The Display—The Sales Plan.

HELP IN ADVERTISING—The Scheme—The Copy—The Designs—The Typesetting—The Media.

95 FETTER LANE, LONDON, E.C.

GRIMBLE'S PURE VINEGAR.

Brewery : LONDON, N.W.

G. S. MUMFORD, FARRINGTON RD., LONDON, E.C.

No. 1 Finest Pure CRUSHED LINSEED	20/cwt.	Finest Pure STARCH POWDER	22/cwt.
No. 2 Pure CRUSHED LINSEED	19/cwt.	No. 1 Finest Light Pure PRECIPITATED CHALK	25/cwt.
Best Cleaned LINSEED (TEA)	19/cwt.	EPSOM SALTS, E.S.S. Purified, Clean, and Dry	11/6 cwt.
No. 1 Finest Pure FULLER'S EARTH (Light Colour)	15/cwt.	Finest Levigated "WHITE EARTH" (Toilet purposes)	18/cwt.
Finest Compound LIQUORICE POWDER	/8 & 1/ lb.	Finest Pure TOILET OATMEAL, SPECIAL	32/cwt.
Finest Pure LIQUORICE JUICE	/10 lb.	Finest ARROWROOT	1/ lb.
BICARB. SODA Finest	15/cwt.	FULLER'S EARTH (In Dredgers)	1 1/2 & 6

S.V.M. METHYLATED SPIRIT Also RECTIFIED SPIRIT. S.V.R. O.P.

Jas. Burrough Ltd. Cale Distillery, Hutton Road,
LAMBETH S.E.

"NYTO" Is being extensively advertised in all the leading papers. Chemists would do well to be prepared for the demand which is sure to ensue. Retail **2d.**; Wholesale **1/6** per doz. through all the Drug and Sundry houses.
London Distributing Agents:
MAY, ROBERTS & CO.,
9 Clerkenwell Road, E.C.

SHAMPOO POWDER
For KILLING VERMIN on
the HEAD.

FLETCHERS' HYDROBROMATES.

The titles "Syr. Hydrobrom." and "Syr. Hydrobrom. c. Strychnia" were originated by us in the year 1879 and can only be legitimately applied to FLETCHERS' HYDROBROMATES. Legal proceedings will be instituted against any firm or person dispensing or offering for sale fraudulent imitations of FLETCHERS' SYRUPS.

SOLE PROPRIETORS:

FLETCHER, FLETCHER & CO. LD., LONDON, N.

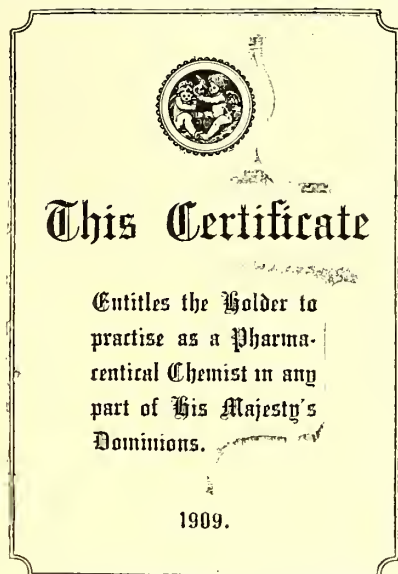
1909.

EXCEPT in regard to outlining the commercial and trading features of the closing year (see p. 27), we have departed from the old custom of reviewing the year's events in all departments of pharmacy in the chemical and drug trades. In this we are the victims of circumstances. The present-day outlook is more to the future than to the past, so, instead of glancing back over 1908, we look forward to 1909, wishing all our readers at home and abroad a prosperous and happy New Year. We are glad to have associated with us in this greeting a number of the leading firms in the trade, who in the present and last two issues of THE CHEMIST AND DRUGGIST have inserted seasonable messages

to their customers, and we have pleasure in naming them here :

Aérators, Ltd., London, N.
 Alliance Drug and Chemical Co., London, E.C.
 Baiss Bros. & Stevenson, Ltd., Jewry Street, E.C.
 Berdoe & Fish, 35 Jewry Street, London, E.C.
 Brett & Co., 8 West Street, Leicester.
 H. Bronnley & Co., Ltd., Acton Vale, W.
 Burge, Warren & Ridgley, Ltd., Great Saffron Hill, E.C.
 Burgoyne, Burbidges & Co., London, E.C.
 A. S. Cartwright, Ltd., Hockley, Birmingham.
 Coleman & Co., Ltd., Norwich.
 Edward Cook & Co., Ltd., soap specialists, London, E.
 Arthur H. Cox, Ltd., Brighton.
 Daisy, Ltd., Leeds.
 Edwards' Harlene Co., 95/96 High Holborn, London, W.C.
 The Erasmic Co., Ltd., London and Warrington.
 Evans Sons Lescher & Webb, Ltd., Liverpool and London.
 Goodall, Backhouse & Co., Leeds and London.
 Harvey & Co. (Dublin), Ltd.
 J. H. Haywood, Nottingham.
 Herrings & Co., Aldersgate Street, London, E.C.
 C. J. Hewlett & Son., Ltd., Charlotte Street, London, E.C.
 R. Hovenden & Sons, Ltd., Berners Street and City Road, London.
 Idris & Co., Ltd., Camden Town, London, N.W.
 E. E. Jackson, Crediton.
 Knoll & Co., Harp Lane, London, E.C.
 Leath & Ross, Duke Street, London, W.
 London College of Chemistry, Pharmacy, and Botany, Clapham Road, London, S.W.
 Lorimer & Co., Ltd., London, N.
 J. & R. McCracken, Bush Lane, London, E.C.
 J. F. Macfarlan & Co., Edinburgh and London.
 W. Martindale, 10 New Cavendish Street, London, W.
 S. Maw, Son & Sons, Aldersgate Street, London, E.C.
 Natural Food Co., Ltd., Bethnal Green, London, E.
 Oppenheimer, Son & Co., Ltd., Queen Victoria Street, London, E.C.
 W. Patey & Co., Scrutton Street, London, E.C.
 H. Poths & Co., Farringdon Street, London, E.C.
 B. Robinson & Co., Ltd., Pendleton, Manchester.
 Sangers, Euston Road, London, N.W.
 T. & H. Smith, Ltd., Edinburgh, Glasgow, and London.
 Squire & Sons, Oxford Street, London, W.
 Thomas Tyrer & Co., Stratford, London, E.
 Wright, Layman & Umney, Ltd., Southwark Street, London, S.E.

We have also to acknowledge greetings from many of our subscribers abroad. Perhaps the quaintest and most interesting is the one we have received from the Pharmacy Board of Queensland, which, to mark the progress in the history of British pharmacy, asks us to turn over the leaf of the card, where we find this printed in red and black :



This naturally takes us to the outstanding event in British

pharmacy during 1908—namely, the passing of the Poisons and Pharmacy Bill and the settling of a twenty-eight years' disputation of what has been known as the "Company Question." The aspiration of Queensland is for the reciprocity of pharmaceutical certificates throughout the Empire. It is many years since THE CHEMIST AND DRUGGIST commended this subject to the Pharmaceutical Society of Great Britain; subsequently Mr. Joseph Chamberlain, when Colonial Secretary, took up the matter, and now in the new Act there is provided a basis of reciprocity so far as Great Britain and the Colonies are concerned. It is significant of the depth of feeling on this subject that reciprocity between Great Britain and Ireland, which might have been first on the principle that "charity begins at home," is barred by the Act. Nevertheless, the year upon which we have entered may see some important developments on the lines that Queensland pharmacists aspire to; but, any way, we trust it will be noted for increasing fraternity among British pharmacists, and that prosperity will prevail in all departments of the chemical and drug trades.

The New Act.

I.—"The Business of . . . Chemist and Druggist."

SYSTEMATIC exposition of the Poisons and Pharmacy Act, 1908, is desirable and necessary, and in beginning a series of articles on the subject we are at the outset precluded from comment upon the sale of poisonous substances for agricultural and horticultural purposes, because Section 2, which deals with that part of the subject, is not complete. Subsection 3 of the section provides for making regulations by his Majesty in Council, and when these are made they have to be laid before Parliament. It is not compulsory upon the Privy Council to make regulations, but it is intended that they shall be made, and as Parliament will not meet until February 16 it will be better to reserve discussion of this part of the Act until the regulations are before us. A more pressing subject in the meantime is Section 3. This is divided into four subsections, and the objects may be briefly stated thus :

Every premises in Great Britain wherein pharmaceutical chemists and chemists and druggists carry on business as such must be *bona fide* managed by pharmaceutical chemists or chemists and druggists, as the case may be, whose names and certificates of qualification are exhibited in the premises.

The businesses of deceased pharmaceutical chemists or chemists and druggists may be continued by executors on the foregoing condition.

Registered chemists and druggists may use the title "pharmacist" without incurring the 1868 penalty of 5*l*.

Companies (or other bodies corporate) and firms in Scotland may carry on the business of a pharmaceutical chemist or chemist and druggist if that part of it relating to the keeping, retailing, and dispensing of poisons is under the control of a superintendent who is a registered pharmaceutical chemist or chemist and druggist, and who is registered by the Pharmacy Acts Registrar as superintendent. One person can act in that capacity for one company only. The provisions as to shop management applicable to the premises of individuals also apply to the premises of companies and firms, with the exception that if the superintendent manages a shop his name and certificate need not be exhibited. Moreover, if a company or firm use the title "chemist and druggist" or its equivalent, the superintendent aforesaid must be a member of the board of directors or a partner in the firm. Otherwise companies, and firms in Scotland, are made liable for offences under Section 12 of the 1852 Act (using title of pharmaceutical chemist) and Sections 1 and 15 of the 1868 Act, from which they are not specially exonerated by this Act.

The first problem which arises is, What is "the business of pharmaceutical chemist or chemist and druggist"? Some suppose it means simply using the title and selling or dis-

pensing poisons; but the section itself goes further than that, for it says (Subsection 4):

Carry on the business of a pharmaceutical chemist or chemist and druggist if the business . . . so far as it relates to the keeping, retailing, and dispensing of poisons, is, etc.

"So far" here conveys the idea of "part." Probably the provision was meant to cover the case of departmental stores, but we have no right to read anything into the Act. "The business of pharmaceutical chemist or chemist and druggist" alone is mentioned, and the words of the subsection imply that it is something more than "keeping, retailing, and dispensing poisons." Sooner or later, therefore, a definition of the business covered by the Act must be given or obtained. In the first place, two kinds of business are mentioned—(1) that of pharmaceutical chemist, and (2) that of chemist and druggist. The 1852 Act deals specially with the former, but affords little guidance as to nature of the business which pharmaceutical chemists carry on. They must be examined in their knowledge of the Latin language, in botany, in materia medica, and in pharmaceutical and general chemistry, and other subjects determined by by-law, and upon the results of the examination depends the granting to them of "certificates . . . to exercise the business or calling of pharmaceutical chemists." It becomes, therefore, a matter of evidence what that business is, for the new Act requires that in every premises where a pharmaceutical chemist carries on his business as such he must have a pharmaceutical chemist as manager if he does not conduct the business himself. The significance of the requirement need not be emphasised; it is too glaringly obvious to every Major man who carries on his business in more premises than one. Does that fact bring him within the section as regards his branches? This is the crucial question.

Now let us look at the case of chemists and druggists, a class in which all pharmaceutical chemists are included. The 1868 Act is somewhat more precise about the business of persons registered under it. Section 3 refers to—

The business of a chemist and druggist, in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners.

We do not think this can be ignored in considering what the business of a chemist and druggist is under Section 3 of the 1908 Act. We may also recall the dictum of Lord Selborne in the 1880 decision:

Before the Act passed it was open to all his Majesty's subjects to carry on the business of a chemist and druggist, and, for that purpose, to keep an open shop for the sale, among other articles, of poisons.

In all the circumstances, therefore, we suggest that where branch premises are carried on by chemists and druggists in which

- (1) Their names and titles are used;
- (2) Poisons are retailed and dispensed;
- (3) The prescriptions of duly qualified medical practitioners are compounded,

they must be *bona fide* conducted by registered chemists and druggists as managers. If the title "pharmaceutical chemist" is used in branch premises a pharmaceutical chemist must be the manager, but pharmaceutical chemists may use their Minor title and have a chemist and druggist manager. The importance of knowing what "the business" is within the meaning of the law is chiefly of interest to pharmaceutical chemists and chemists and druggists, because the statutory provisions are obligatory upon them, and if they fail to provide for the legal management of the premises where they carry on "the business" they are liable to a penalty of 5*l*. In some cases there must of necessity be a desire to cut down "the business" of branches so as to exclude the premises from the statutory conditions

of management, and while we think that this is not impossible we envy the man who is prepared to draw the line for either grade in face of the potentialities of evidence as to what the business of a pharmaceutical chemist or of a chemist and druggist may be. The importance of the matter is enhanced by its bearing upon companies which henceforth may be registered to carry on the business of chemist and druggist, and ultimately it may have far-reaching influence. Thus, if it should be held that the business of a chemist and druggist includes the three acts mentioned, or more (*e.g.*, the sale of any medicines), and, consequently, that the premises of registered men must be managed by registered men, a principle in respect to the sale of medicines would be established and it would be of far-reaching importance, for it might ultimately receive legislative sanction. On the whole, therefore, registered chemists would be unwise for the sake of personal convenience to seek the minimum of what their "business" means.

The Earthquake in Sicily.

THE unprecedented calamity which has befallen Sicily and Calabria, resulting in the destruction of the prosperous ports of Messina, Reggio, and other towns and villages on the Straits of Messina has thoroughly disorganised the markets for all Sicilian products, especially lemon oil, citrate of lime, and citric acid. Quotations for these are quite nominal, and the position at the moment is that nobody appears willing to sell, and nobody wants to buy at fancy prices unless actually compelled. Practically all the London agents for the leading Messina exporters were on Wednesday without news as to whether their principals were alive or not, and the many cables of condolences and inquiries sent from this side have so far remained unanswered, telegraphic communication with Messina being interrupted. Some days must elapse, therefore, before news comes through. As regards lemon oil, the calamity could not have occurred at a worse time, for the shipping season was practically at its height, December and January being the principal months. It appears that quite a good contract business had been done in new crop for shipment during these months, as the prices were at a reasonably low figure, the market having gradually eased to about 2*s*. 7*d*. c.i.f. as new crop came on the Sicilian market. Now, however, it is difficult to say whether many of these contracts will be executed as *force majeure* applies should a firm no longer exist. Nobody can yet say whether any lemon oil has been destroyed, but as much of the new oil on its arrival from the country districts is stored in tanks in Messina prior to shipment, the probability is that a great deal of it, if not all, has been lost. Fair quantities have recently arrived in London, and several consignments are now on the water; but the fact remains that the bulk of the shipments have not yet gone forward. Some extreme prices have been named on 'Change this week, it being said that from 5*s*. to 7*s*. 6*d*. per lb. has been paid on the spot; but as already indicated, the prices are nominal, business being quite retail at these inflated prices. If, when trade is resumed, it is found that adequate stocks of lemon oil remain, there will no doubt be keen sellers anxious to realise, as there always are in periods of stress. But should much of the stock have been destroyed (as expert opinion in London believes), we are likely to see high prices for lemon this year. There are few sellers of citric acid at the moment, pending definite news, and the same remark applies to other produce, such as bergamot and orange oils, squill, liquorice-juce, etc. The remainder of this article was in type waiting for insertion when news of the disaster was received. It is chiefly

of melancholy interest now, but it indicates some of the leading features regarding citrate of lime.

Any information throwing light on the uncertain position of the lemon-industry in Sicily as the result of the formation of the Camera Agrumaria is interesting at the present time, especially as all those concerned in the production and sale of citric acid are more or less puzzled as to whether the new law will be successful, considering that the old methods of doing business in citrate are being swept away for new and doubtful methods which are giving rise to much disquietude throughout the trade. It is for this reason that we call attention to the report of the United States Consul Arthur S. Cheney, of Messina, who was instructed to investigate and report to his Government. He has gone thoroughly into the subject of the lemon-industry in Sicily, his report covering the cultivation and harvesting of lemons, the manufacture of citrate of lime and lemon-juice, and the new law concerning the Camera Agrumaria. Much has been written in the past concerning the cultivation of lemons and the manufacture of lemon oil and citrate of lime, so that it is difficult to say anything new about them. We therefore pass on to the commercial side, from which we learn that at the close of 1907 about 3,000 pipes of citrate of lime remained on hand in Sicily, and that the production this year has been closely estimated at 23,000 pipes. The crop conditions this year having been favourable, the Consul believes the production next year will be probably 20 per cent. more than in the past season, or in round numbers 27,000 pipes. This would give a total (production and stock on hand) for two years of 53,000 pipes. The average yearly consumption only equals 16,500 pipes, and there is no reason to suppose that the demand will suddenly increase. On the basis of the above figures there will be a stock on hand of some 20,000 pipes of citrate, or over a year's supply, at the close of the season 1908 and 1909, and the next season's production coming on. It is then that the danger of a crisis will be apparent, if, indeed, the present law has not proved inoperative. The Consul describes the various methods by which lemon-products are sold, reference to which was made in our issue of October 10 (p. 585), and shows how prices of citrate have fluctuated during the past nine years. There are about 250 makers of citrate in Calabria and Sicily, the majority of whom possess but limited capital, and their competition contributed considerably to keep up the prices of lemons. Not being able to buy for lack of advances, the number of purchases of refuse fruit must diminish, and it is claimed that the present law will injure these manufacturers and indirectly the lemon-growers. Undoubtedly the decline in prices is due to the great excess of production over consumption, and there appears to be little doubt, the Consul remarks in conclusion, that the success of the present scheme to enhance the value of citrate through the new law will prove unsuccessful, and that the effects of supply and demand will make themselves felt.

Certificates of Qualification.

We have received a number of inquiries as to what registered chemists and druggists who have no certificate of qualification will do on April 1, when they, as managers of chemists' shops, have to show their certificates in the premises. Their case will be met, we understand, by Section 7 of the 1852 Act, as follows:

The Registrar to be appointed under or by virtue of this Act shall be bound, on the application of any person paying one shilling, to certify under his hand whether or no any person whose name and address shall be furnished to him appears in the said register or is a member of the Pharmaceutical Society of Great Britain or not; and the certificate of such Registrar, signed by the said Registrar, and countersigned by the President or two members of the

Council of the said Society, shall, in the absence of evidence to the contrary, be sufficient evidence of the facts therein stated up to the date of the said certificate.

This is still operative, Section 13 of the 1863 Act continuing it as regards persons registered under that Act. Consequently those who desire a certificate of their qualification or registration will obtain one from the Registrar, 17 Bloomsbury Square, London, W.C., on the terms quoted. It is supposed that the certificate of membership of the Pharmaceutical Society will serve the purpose as well, but we do not think so. The 1908 Act refers to chemists and druggists and pharmaceutical chemists whose certificates of qualification have to be exhibited: that is, their qualifications as such. Membership of the Society is not a qualification in the statutory sense, so that the certificate of membership is useless for the required purpose.

Pagenstecher's Ointment.

This well-known preparation of yellow oxide of mercury has of recent years reached such a degree of demand as to be regularly quoted in some wholesale price-lists. It seemed to us advisable that an authoritative declaration that the ointment is a known, admitted, and approved remedy should be obtained, and accordingly we entered into correspondence with the Board of Inland Revenue, whose final letter on the subject is appended:

Inland Revenue, Somerset House, London, W.C.,
December 23, 1908.

Sir,—With reference to your letter of the 14th instant and previous correspondence, I am directed by the Board of Inland Revenue to acquaint you that, in view of the evidence which you have now laid before them, they will not for the purposes of Medicine-stamp Duty regard the titles "Pagenstecher's Ointment" and "Pagenstecher's Eye-ointment" as involving a claim to a proprietary right.

I am, Sir, your obedient servant,

J. P. BYRNE,
Assistant Secretary.

The Editor, THE CHEMIST AND DRUGGIST, 42 Cannon Street.

The original formula for the ointment of two strengths is given in "Pharmaceutical Formulas," p. 813, with some notes on its origin.

"Truth" on Barkola.

The current issue of "Truth" contains a column or so dealing with a letter from the Old Fort Chemical Co., proprietors of Barkola, replying to observations by our contemporary regarding the manner in which that speciality is advertised. "Truth" says:

The proprietors of the stuff contend that it is "absolutely an original preparation." Then they go on to say:

As some corroboration of our position we may point to the recently published book, "Pharmaceutical Formulæ" (1908), in which, although a vast collection of formulæ for rheumatism are brought together, not one of the ingredients of Barkola is mentioned therein; while, on the other hand, Squire's "Companion to the British Pharmacopœia" mentions every one of the ingredients of Barkola in terms of the highest praise as remedies for the ailments which Barkola purports to relieve or cure. . . .

If Squire's "Companion" does that, it fully bears out the statement of my previous correspondent that this class of preparations "are, without exception, simply drugs that have been in use for years." "Pharmaceutical Formulæ" is, I understand, a collection of prescriptions in use among dispensing chemists which is issued by the Pharmaceutical Society, chiefly for the convenience of its members.

The object of the present note is to contradict the statement that "Pharmaceutical Formulas" is published by the Pharmaceutical Society. It is a book published by THE CHEMIST AND DRUGGIST, and the first of seven editions was published in April 1893. We do not know what the ingredients of Barkola are. The preparation is not mentioned specifically in "P.F." nor in Squire's "Companion," although the ingredients may be. "Truth" goes on to say:

In France and the United States the law requires that all proprietary medicines shall have the formula of their composition clearly stated on the label affixed to the box

or bottle that contains them. A similar law is now before the Italian Chamber, and it seems to me that we should do well to adopt the same course.

Our contemporary is wrong about French and United States law. In neither country is the *formula* required to be on the label. In the United States all that is necessary is that the label shall bear the quantity or proportion of alcohol and certain named narcotics if they are present in the medicine.

Desirable Pharmacopœial Additions.

Dr. J. C. McWalter enumerates in the "Medical Press" (No. 3,634, p. 719) a few of the drugs which he considers ought to find a place in the coming British Pharmacopœia. The drugs and reasons given are, briefly, as follows:

ACETONUM is of decided use as an antispasmodic, and as a solvent for more active inhalents in asthmatic affections.

ACIDUM ACETYL-SALICYLICUM certainly produces marvellous results in some forms of rheumatism.

ACIDUM FORMICUM, although possessing but feeble stimulating power, requires recognition if only for the purpose of expressing its inutility.

ACIDUM GLYCEROPHOSPHORICUM increases metabolism.

ACIDUM TRICHLORACETICUM is a powerful disinfectant, useful, when diluted, in erysipelas or gonorrhœa.

ADRENALIN or some imitation must, of course, be in the next B.P., although many are afraid to declare it is only of limited and transitory utility.

AMMONII PHOSPHAS is useful in uric-acid diathesis.

BISMUTHI SUBGALLAS appears to be the most useful bismuth preparation for dusting-purposes.

BROMOFORMUM ought to be investigated as a whooping-cough medicine.

CAFFEINÆ SODIOSALICYLAS is one of the best drugs for heart-failure.

CALCI BROMIDUM seems to have a future in epilepsy.

DIGITOXINUM presents a definite crystalline active principle of digitalis.

ELIXIR GLYCEROPHOSPHATUM, a palatable preparation, should be included.

EMP. BELLADONNÆ LIQ. is more cleanly in use than the plaster.

EMULSIO OL. MORRHUÆ.—All physicians order cod-liver oil or petroleum emulsion.

EXT. MEDULLÆ RUBRÆ LIQ. increases the number of red corpuscles.

EXT. SALICIS NIGRÆ LIQ. has proved to be a satisfactory ovarian and orchitic sedative.

EXT. VIBURNI PRUNIFOLII LIQ. should be included and standardised.

HEXAMETHYLENETETRAMINE.—The chief difficulty is a suitable title.

HYDRASTINA.—The alkaloid ought to be recognised if only to distinguish it from the resinoid.

IODIPIN.—Some soluble and readily absorbed substitute for iodine ointment is required.

LIN. CAPSI.—A lively liniment like that of the Austrian Pharmacopœia is often wanted.

MESOTAN is used in joint and muscle affections.

METHYL-SULPHONAL (Trional) has come to stay. In this case, as also with Diethylsulphone, Piperazine, and Stovaine, the names are again the difficulty.

TR. CARMINATIVA.—The B.P. does not contain anything quite like a flavouring-tincture of ginger, caraway, cinnamon, and cloves.

SET. MYRICÆ VEL PIMENTE, a useful hair-stimulant, in a form ready for prescribing, is required.

STRONTII BROMIDUM is distinctly useful, with other bromides, in epilepsy.

Dr. McWalter gives the list to stimulate discussion as to the worthiness of drugs to be added to the Pharmacopœia, and in order that the Therapeutic Section of the British Medical Association may determine their merits or demerits. His own difficulty about names for medicines whose popularity with practitioners has been secured through commercial enterprise is not likely to impede the B.P. Committee. In the past the B.P. has not been conspicuous for such conscientious scruples as Dr. McWalter exhibits.

What is a Patented Article?

The United States Consul at Glasgow has reported that there is a doubt as to the interpretation of the words "to an adequate extent" in reference to the manufacture of patented articles in the United Kingdom under the terms

of the Patents Act, 1906. The point is whether a foreign firm of manufacturers could make the various parts of a machine (a typewriter, for example) in their own country and then "assemble" these parts in the United Kingdom and yet be said to manufacture the article "to an adequate extent." The opinion of some patent experts is that this would not meet the requirements of the Act. The word "manufacture" is not likely to be construed in the narrow sense which is applicable when a question of infringement has to be considered, but probably only a decision of the Courts will finally set the question at rest, if it is worth the while of any foreign manufacturer to bring a case into Court. The Comptroller need not revoke a patent if satisfactory reasons are shown why the patented article is not made in this country. In a recent case it has been held that the allegation that a patented article can be made in a foreign country at a cheaper rate, owing to lower wages, is not an adequate reason for not revoking a patent. A flaw in the Patent Act, 1906, is considered to be the fact that a foreign patent which is not worked here does not expire automatically, but is only revoked at the request of some person.

Winter Session.

Brief Records.

The Romance of Quinine was the subject dealt with by Mr. A. Norman Harris (Secretary) at a meeting of the Tunbridge Wells and District Pharmaceutical Assistants' Association, held at the Academy, 50 Dudley Road, on Thursday, December 17. Mr. C. Button (President) was in the chair. Mr. Harris described in an interesting manner the discovery and first use of cinchona bark in medicine, the present methods of collection, and the preparation of the alkaloids. **The Dundee and District Chemists' Assistants' and Apprentices' Association** held a social evening in Mather's Hotel on December 18. A large number of members and friends were present, and an excellent programme was provided by Misses Brand, Forbes, O'Donnell, Robertson, and Shields, and Messrs. Forbes, Fraser, Soutar, and Taylor. Mr. A. T. White presided. The Hon. President (Mr. J. S. Whyte) made a few remarks on the success of the Association. Mr. Frank Mackay made the arrangements.

"**THE CHEMIST-OPTICIAN**" (Office of the *C. & D.*, 4s.) is the only book on optics written specially for those who carry on the business of a chemist and druggist. The "Bulletin of Pharmacy" thus refers to it: "We have perused with considerable interest a new book entitled 'The Chemist-Optician.' The aim of the publishers has been to present a work founded on a knowledge of physics which the pharmacist acquires in his college course. Purposely, however, the treatise is written in everyday language rather than in scientific style. It tells in a simple way how abnormalities of vision are corrected by properly fitted spectacles. There is an abundance of illustrations, but mathematical formulas are conspicuous by their absence. This book is one of the 'Chemist and Druggist' series, having been written to instruct the retail pharmacist how to fit glasses or dispense oculists' prescriptions. It comprises the theory necessary to understand the practice of visual optics, and the apparatus and instruments employed therein, with a wide range of data, facts, and suggestions, gathered from experience."

MUSCARINE.—In connection with the death from neuritis alleged to have been induced by muscarine (see p. 13), we may state that muscarine, $\text{CH}(\text{OH})\cdot\text{CH}_2\cdot\text{N}(\text{CH}_3)_3\text{OH}$, is the hydrated aldehyde corresponding to the alcohol choline (Hydroxyethyl-trimethyl-ammonium-hydroxide). Both alkaloids are contained in the poisonous fly agaric, *Amanita (Agaricus) muscarius*, to the extent of about 1 per cent., the greater proportion being choline. The usual alkaloidal solvents do not remove muscarine from the fungus, and the commercial product is usually obtained by the oxidation of choline hydrochloride (from egg-lecithin) by means of nitric acid. Homœopaths use the drug in the form of tincture, and a first attenuation of the alkaloid in water (1 in 10). Mr. Harwood Lescher, in his "Recent Materia Medica," gives the dose of muscarine nitrate as $\frac{1}{2}$ to $\frac{1}{4}$ grain hypodermically, or $\frac{1}{10}$ grain internally. It resembles physostigmine in physiological action, and is antagonistic to atropine. It contracts the pupil of the eye, which, however, dilates before death. It produces free salivation and weeping, and great muscular weakness, deepening into paralysis and death. Schmeideburg and Koppe state that the action on the abdominal viscera is very marked, the muscles of the intestines, bladder, and spleen being tetanically contracted, and the intestines transformed into hard white cords, which may afterwards become somewhat relaxed.

Extending a Proprietary.

By Thomas Russell.

I.

PRACTICALLY every chemist has proprietaries of his own of some sort. He puts up a pill, a cough-mixture, a cosmetic ointment, or something of the kind, either getting the preparation manufactured for him by some wholesale house or compounding it himself. The formula itself may be of his own invention, or it may have been acquired in some manner. THE CHEMIST AND DRUGGIST often contains formulæ suitable for this use.

Of course it would be nice to extend the sale of these things beyond one's own shop, and big businesses have arisen from small beginnings in this way. The business which I know most about was originated by a retail chemist in a small town in Canada, with no large capital, but with faculties which developed into a striking genius for the business. He became a world-wide advertiser, and died worth considerably over a million sterling, some of which it was my privilege to assist him in making. But the real genius of the business was that of its originator, and he developed it as the business itself developed.

There are no doubt many retail pharmacists capable of propounding a suitable formula for exploitation, and able to develop a latent faculty for advertising and organisation. Both of these are required for the work. If the latent faculty for extensive business exists, growth and extension will develop it, and this faculty is a great deal more important as a factor in ultimate success than pecuniary capital. It is a sort of capital in itself, though it does not show in the books. All the big failures in the proprietary-medicine business have been made with large capital to start with: if there had not been the large capital the failures would not have been big. But most of the striking successes in this line have, on the other hand, been built up on a small capital to start with. The growth of a man's business, therefore, is an agent in expanding his own powers. No one need be afraid of not being able to cope with the ultimate problems if he allows them to develop and be dealt with as they arise. It is of no use crossing bridges until you come to the stream.

The foundation of a pharmaceutical proprietary business must of course be the product itself, and the most essential point about the product is that it have distinctiveness. It is very easy, however, either to exaggerate or to undervalue the importance of novelty, and even of merit, in the goods that are going to be pushed. A good formula—even the most meritorious formula ever invented—will not *by itself* create business. There must be something else behind it. On the other hand, this "something else" is of no use without a good formula.

The way to devise a good formula is none of my business. Readers of THE CHEMIST AND DRUGGIST understand this as well as it can possibly be understood. All that requires to be said on the subject is that the goods must be something capable of general employment and that the article to be pushed must be a little different, or as widely as possible different, from anything commonly used for the purpose. Vinolia cream is used, I suppose, much in the same way as ordinary cold-cream. But Vinolia cream is not ordinary cold-cream. It is distinctive. The sale of Odol is no doubt greatly helped by the distinctive bottle, but the preparation itself is equally distinctive. Instances of the same sort could be multiplied indefinitely.

In the interest of individuality and distinctiveness something more than a stock proprietary manufactured by a wholesaler from his own formula is to be desired. And for the same reason the chemist who would found a proprietary business destined to extend beyond his own shop will need to design or procure the designing of wrappers and labels, and write or procure the writing of directions for use, belonging individually to himself.

On this point something will be said in my next article.

When immersed in the throes of life's bustle,
And with business problems we tussle,

To the *Diary* we turn

For instruction—and learn

Many things—but the main one is "hustle."

J. J. Witten, Sunderland.

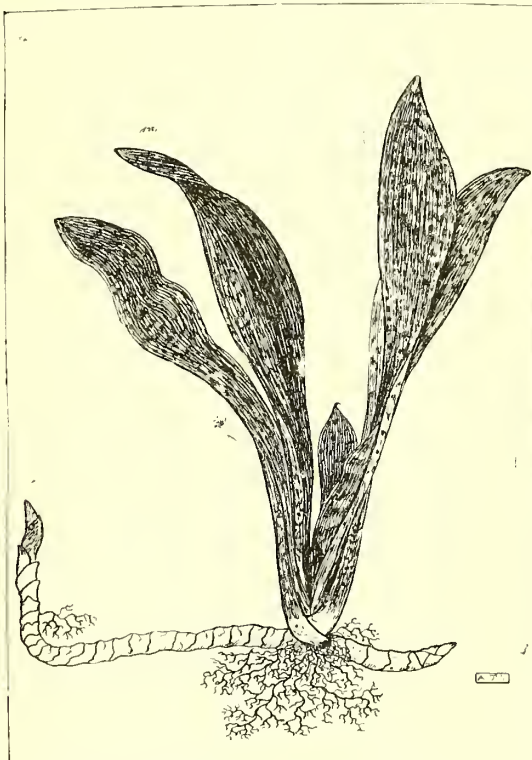
South African Plants.

Notes on those of Medicinal Interest.

By G. E. Oliver.

SANSEVIERA THYRSIFLORA.

THIS plant, unlike most others which have a real or supposed medicinal value and which are familiar only to the few, is commonly known to all natives by the name *isi-Kolokoto*, and is much esteemed by them for various ailments, but chiefly for piles, for which it is said (and there are many Europeans who are of the same opinion) to be almost infallible. It belongs to the natural order *Smilacaceæ*, and is widely distributed in the eastern portion of Cape Colony, growing socially under the shade of trees, and particularly among the dense bush lining the water-courses. It spreads by means of fleshy underground stems, and its mode of growth is well shown in Mr. Sutherland's drawing.



SANSEVIERA THYRSIFLORA,

Showing Leaves and Growth of Underground Stem, with Rootlets.

here reproduced. These stems are the part used medicinally. It may readily be known by its lanceolate, evergreen, leathery-looking leaves, which are from 1 to 3 ft. in length, and its creeping underground stem growing at no great distance below the surface and easily pulled up. Grown in favourable situations, it produces a fine spike of greenish flowers, followed in the autumn by bright red, one-seeded berries. It is not surprising that a plant whose virtues are so universally believed in should have interested medical practitioners and chemists, and preparations have from time to time been made of it. Whatever the result of experiments in its administration may have been, they have not had the effect of bringing the plant into common use in European medicine, and some people pronounce the drug worthless for the purpose for which it is commonly reputed to be so good. It is also said to be efficacious in the expulsion of certain kinds of intestinal worms, but its value in this respect is doubtful.

When gathered at the correct season of the year and properly prepared, it appears to be a mild and agreeable laxative, free from bitterness and unattended by griping or nausea. It is probable that preparations made from it

have been produced (1) without due regard to the small amount of active ingredient relative to the bulk of rhizome, and (2) from rhizome collected at the wrong season of the year. The natives are said to chew up to 2 or 3 oz. of the fresh succulent rhizome, rejecting the fibrous portion and swallowing the juice; and as the rhizome yields half its weight of juice on expression, a dose of less than an ounce or an ounce and a half would obviously be ineffective. Again, for several months in the year after the spring rains the plant is exhausting its energies in the production of strong succulent new shoots, which are inactive. This view is confirmed from native sources.

When the fresh rhizome is bruised in a mortar, the fibre, which is tough, separates in a tangled mass from the pulpy portion. The expressed juice has a slightly sweetish taste and an acid reaction. It readily reduces the copper in Fehling's test, and when filtered the clear juice yields a flocculent precipitate on boiling and precipitates heavily with lead acetate. Anhydrous ether extracts from the dried drug a small quantity of fatty substance having the colour and smell of palm oil. Its action as a laxative may perhaps be found to be due to some such substance as glycyrrhizin, and one is constantly reminded of liquorice by taste and smell when making concentrated preparation



SANSEVIERIA THYRSIFLORA.
(From a photograph.)

of sansevieria. As a laxative, however, it is more active than the former, and from the absence of bitterness and other unpleasant qualities it should in course of time find a useful place in medicine. Two species are recognised, both of which yield a serviceable fibre.

Dr. Becker, of Grahamstown, who has paid much attention to South African plants of medicinal interest, communicates the following to the author:

Its action is on the rectum and on the lower part in particular, and it is therefore used by natives and by the Dutch as a remedy for piles. The action is very similar to rhamnus frangula of the North of Germany, where it is used as a household medicine and is mostly combined with elder-flowers, adding sudorific and diuretic properties.

THE imports of chemical and pharmaceutical products, colouring materials and colours, perfumery, varnishes, artificial manures, and explosives into Serbia during 1907 from the United Kingdom amounted in value to 4,622, and exports of similar goods from Serbia to the United Kingdom were valued at 740.

Medical Gleanings.

Orpiment and Atoxyl in Trypanosomiasis in Horses.

A. THIROUX and L. Teppaz (Acad. des Sciences, Paris, October 12) successfully treated *Trypanosomiasis cazalbouri* and *T. dimorphon* in three horses by combined treatment with orpiment and atoxyl. Souma in two horses was amenable to orpiment alone, and m'bori may be curable by the orpiment and atoxyl treatment.

Cocaine Anaesthesia.

MESSRS. AUDY AND ANDRÉ state ("Répertoire de Pharmacie") that sodium vanillate intensifies the anæsthetic action of cocaine. The formula they give for use in dentistry and surgery is as follows:

Cocaine, pure	...	...	0.01 gram
Sodium vanillate	...	...	0.01 gram
Vervein water	...	...	1 c.c.

Oxygen for Athletes.

"FROM further observations made on athletes, on myself, and on horses, I have come to the conclusion that oxygen inhalation followed by, or accompanying, exercise is a most active and effective form of treatment." So writes Mr. Leonard Hill, M.B., F.R.S., in the "British Medical Journal." This is followed by accounts of experiments which prove the value of oxygen, the last being that of Wolffe, the Channel swimmer.

Antiformin.

UHLENHUTH and Xylander ("Berl. Klin. Woch.," July 20, 1908) deal with a disinfectant called antiformin, a mixture of an alkaline hypochlorite and hydrate, the latter increasing the disinfecting-power and keeping-properties. The clear yellow solution smells of chlorine, and possesses dissolving-properties which should render it useful as a general excrementitious disinfectant in 15-per-cent. strength. Bacillary suspensions, except tubercle bacilli, are completely dissolved in a few minutes with 0.5 to 2 per cent. of antiformin. Sputum forms a homogeneous fluid with 15 to 20 of the disinfectant, which provides a means of preventing accidental infection when injecting guinea-pigs with sputum in test for tubercle. Typhoid stools dissolve in eight hours with this strength. A 2- to 5-per-cent. solution kills cholera, typhoid, coli, and coccus groups in two to five minutes. *Bacillus suispestiferus* and the plague bacillus prove much more resistant, requiring over half an hour and two hours respectively, while anthrax spores are highly resistant to the action of the disinfectant.

Therapeutics of Cancer.

DR. LOVELL DRAGE discusses in "The Lancet," 1908, p. 1367, the palliative treatment of inoperable cancer, and in the course of his article deals with the following remedies:

Sodium Cinnamate.—Hypodermic doses of 30 minims of 10-per-cent. glycerin solution gave encouraging results.

Sodium Orthocoumarate.—In 25-minim doses of 22-per-cent. solution given hypodermically thrice weekly produces considerable leucocytosis, especially if 1-minim doses of cinnamic aldehyde in capsules, or 5-grain doses of tyllamarin, are given thrice daily after food.

The efficacy of both these methods of treatment is testified by the cited cases. Dr. Drage considers that the exhibition of remedies such as trypsin or Coley's fluid appears to be based on insecure foundations. Dr. G. T. Morgan, F.I.C., adds to the paper some remarks upon certain recent developments in therapeutics considered from the chemical standpoint. He contrasts by means of graphic formulæ atoxyl and its allies, and shows how ortho, para, and meta coumaric acids are related, the orientation of the complex $\text{CH}:\text{CH}.\text{CO}.\text{H}$ in them being accompanied by variation in the physiological activity. The carboic-acid coefficients are 5.5, 4.5, and 4.0 for the ortho, meta, and para acids respectively. It is a preparation of the first-named of these that is known as tyllamarin. Dr. Morgan also discusses Jowett and Pyman's preparation of methyl cinnamylsalicylate, then deals with certain metals, pointing out that thorium is physiologically more active than cerium. He finally suggests that the combination of these and other metals with organic bodies may increase the number of trustworthy drugs at the disposal of the physician.

Chilblains.

By a Medical Practitioner.

CHILBLAINS (*Erythema pernio*) are due to a vascular disturbance, the actual condition present being one of stasis or sluggish movement of the blood in the veins of the extremities. They appear to be due to a weak circulation, and are said to be common in anæmic girls, although I must say that I have frequently seen them in persons who were not in the least anæmic. They are too well known to require description, and the only disease they are likely to be confused with is *Lupus erythematosus*, which, however, is much more common on the face. It does occur occasionally on the extremities without any evidence of it on the face, and if there are no scales present it may be difficult to differentiate; but the advent of warm weather will always clear up the diagnosis, chilblains then disappearing.

Numerous remedies have been lauded for the prevention, cure, and relief of chilblains, but none of them can be said to be entirely successful in all cases. Those who are subject to them should always keep the extremities covered in cold weather with woollen loose-fitting gloves or stockings. All constriction of any part of the limbs must be avoided, warm water should always be used for washing, and the circulation should be stimulated by active exercise in the open air. Cod-liver oil emulsion and iron and quinine may be given internally. Calcium chloride in doses of 8 grains may be taken for about half-a-dozen doses. This is said to be effective from its power of increasing the coagulability of the blood, but if given for a long period it has the opposite effect. I have tried it, but must confess that the result has been disappointing. In a climate such as ours any remedy may get the credit of curing, because it is seldom that frost lasts long, and the chilblains have a knack of disappearing as soon as the thermometer gets above 32° F. [We have found 15 to 30 grain doses essential.—EDITOR.]

For the troublesome itching a mixture of lin. bellad. and lin. aconit. in equal parts is effective, so are glyc. bellad. and ung. ichthyol. (10 per cent. in equal parts vaseline and lanoline). After the itching has subsided the induration may be removed by gentle friction with lin. terebinth., Japanese oil of camphor, or ung. iodi. When broken, friction should be avoided, and an ointment applied containing bals. peruv. ʒj. in simple ointment ʒj. This may be changed once daily. Ung. resinae or boric ointment may also be used.

Dr. F. Gardiner, assistant physician in the skin department of the Royal Infirmary, Edinburgh, gave in the "Practitioner" last year some information as to his recent experiments. In the early stage he recommends ung. ichthyol. (10 to 20 per cent. in lanoline) or formalin in ointment of from 10 to 50 per cent. strength. If there is any hardening effect on the skin after formalin, he suggests continuing with plain lanoline or vaseline. He has also had good effects from high-frequency currents, x rays, and the faradic current, the last-named being easily applicable, the electrodes being terminated in two bowls of water containing a little salt, and the circuit being completed by the patient placing his hands in the bowls. Apart from electrical methods, Dr. Gardiner finds the following ointment effective:

Hydrarg. ammon. ...	...	gr. x.
Ichthyol. ...	...	gr. x.
Pulv. amyli,		
Pulv. zinci oxidi ...	aa.	ʒij.
Vaselin. ...	...	ʒss.

M. Ft. ung.

To be spread on linen and changed frequently.

If the ulceration is not severe, Beiersdorf's salve muslin of zinc-ichthyol may be used.

WHEN the Prince and Princess of Wales started on their tour round the world many antidotes against seasickness came to hand. One enterprising chemist sent an enormous package containing hundreds of special anti-seasick powders, one of which was to be taken every day while at sea. The Prince was much amused. To Sir Francis Laking he remarked, "I say, Sir Francis, if this fellow expects me to take all these special powders he ought to have sent me a special stomach as well."—From "Strange Gifts to Royalty" in *Chambers's Journal*.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with Sir C. N. Dalton, K.C.M.G., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form No. 7, cost £2, obtainable through any money-order office.

The figures in parentheses refer to the classes applied for.

(From the "Trade-marks Journal," December 23, 1908.)

- "CINQUIN"; for a medicine (3). By T. A. Harrison, 534 High Road, Goodmayes, Ilford. 307,244.
- "SAGRADA BARBER" and "TEKTOLETTES"; for medicinal substances (3). By Barber & Rozner, Operngasse 16, Vienna 307,334, 307,335.
- "EVAPOGEN"; for medicinal substances (3). By C. J. Hewlett & Son, Ltd., 35-42 Charlotte Street, London, E.C. 308,060.
- "DUMVILLE'S OCTUVINE"; for a medicine (3). By E. I. Dumville, Ashford, co. Wicklow. 308,044.
- "SALADIN"; for medicinal chemicals (3) and perfumery (48). By W. Edge & Sons, Ltd., 50 Raphael Street, Bolton, Lancs. 308,105.
- "PENURECO"; for medicinal chemicals (3). By W. O. Pensey, "Breakspear," Brockley Road, London, S.E. 308,224.
- "DIGESTOL"; for medicinal chemicals (3). By James Walker, 12 St. James's Place, Paisley. 308,306.
- "CUTINE"; for an ointment (3). By H. C. Edwards, 17 Queen's Road, Hastings. 308,404.
- "C. S. L." in device; for dental and surgical instruments, etc. (11). By H. Coxeter, 30 Seaton Street, London, N.W. 306,407.
- "PORCELITE"; for hospital appliances (11). By C. W. Witt, 50 Hockley Hill, Birmingham. 306,922.
- "NOWATE," and label device; for metal spectacle-cases, etc. (13). By E. L. Pavton, 66-67 Edward Street Parade, Birmingham. 307,389.
- "SWAN" and device of same; for coconut oil (42). By Erith Oil Works, Ltd., 5 Trinity Square, London, E.C. 305,820.
- "MINERVA BRAND," and label device; for olive oil (42). By H. E. Bouille, 3 and 5 Avenue Pasteur, Marseilles. 306,387.
- Device for goods (44). By the Lagos Stores, Ltd., 6 Stanley Street, Liverpool. 307,051.
- "AMBRINE"; for aerated waters (44). By Jewsbury & Brown, Ardwick Green North, Manchester. 307,479.
- "VILROY"; for a beverage (44). By Basker & Elliott, Ltd., 67 Penarth Road, Cardiff. 308,089.
- "GYPTOL"; for dental preparations (48). By J. A. Bingham, 43 Donegall Place, Belfast. 306,034.
- "DELECTYS"; for perfumery (48). By the Crown Perfumery Co., 1 Tynte Street, Homerton, London, N.E. 306,952.
- "DOWN"; for perfumery (48). By A. L. Smith, 3 Egginton Street, Leicester. 306,455.
- "SOFTO"; for a toilet preparation (48). By M. C. K. Lobbett, 33 Edgware Road, London, W. 307,822.
- "PORANA"; for toilet preparations (48). By L. Silk, 8 Great Turnstile, London, W.C. 308,213.
- "SCHRINA"; for perfumery (48). By W. F. Charles, Zenobia Perfume Works, Loughborough. 308,280.
- "HYGIDENT"; for brushware (50). By H. A. Wanklyn, 17 Manchester Avenue, London, E.C. 307,824.

Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertisement-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.) will be esteemed.

154/67. Makers or patentees of Kennedy's boat-shaped feeding-bottle.

IT IS ANNOUNCED that penny postage between Germany and the United States will come into force in the New Year.

"THE CHEMIST AND DRUGGISTS' DIARY" for 1909 contains, says the "Pharmaceutical Era," a large amount of information of the nature often required at the prescription-counter.

French Codex Formulas.

Selected from the Edition of 1908.

ALCOOLAT DE COCHLÉARIA COMPOSÉ.

Esprit Ardent de Cochléaria.

Fresh cochlearia (scurvy-grass) leaves ... 3,000 grams
Fresh horseradish-root ... 400 "
Alcohol, 80-per-cent. ... 3,500 "

Macerate the comminuted ingredients in the alcohol three days, and distil 3,000 grams.

ALCOOLAT DE FIORAVANTI.

Alcoolat de Térébinthine Composé;
Baume de Fioravanti.

Marsh turpentine ... 500 grams
Elemi, liquid storax, galbanum, myrrh, and laurel-berries, of each ... 100 "
Aloes, galangal, ginger, zedoary, cinnamon, cloves, nutmegs, and dittany of Crete, of each ... 50 "
Alcohol, 80-per-cent. ... 3,000 "

Coarsely powder the galangal, ginger, zedoary, cinnamon, cloves, nutmegs, and laurel-berries, and place in a water-jacketed still interiorly coated with paper; add the alcohol, cover and macerate for four days in the cold; then add the oleoresins, gum-resin, aloes, and storax, macerate for two days more, and distil 2,500 grams.

ALCOOLAT DE GARUS.

Alcoolatum Gari.

Aloes, cloves, and saffron, of each ... 5 grams
Myrrh ... 2 "
Nutmegs ... 10 "
Cinnamon ... 20 "
Alcohol, 80-per-cent. ... 5,000 "

Macerate for four days, strain the liquid, add 1,000 grams of water, and distil 4,500 grams.

ALCOOLAT DE MÉLISSE COMPOSÉ.

Eau de Mélisse des Carmes.

Fresh balm, in flower ... 900 grams
Fresh lemon-peel ... 150 "
Cinnamon, cloves, and nutmegs, of each ... 80 "
Coriander and angelica-root, of each ... 40 "
Alcohol, 80-per-cent. ... 5,000 "

Macerate four days and distil 4,250 grams.

ALCOOLAT VULNÉRAIRE.

Eau Vulnéraire Spiritueuse.

Fresh leaves of wormwood, angelica, basilicum, calamint, fennel, hyssop, marjoram, balm, peppermint, origanum, rosemary, rue, savory, sage, wild thyme, and common thyme, of each ... 100 grams
Flowering-tops of lavender and hypericum, of each ... 100 "
Alcohol, 60-per-cent. ... 4,500 "

Macerate the cut herbs in the alcohol for six days, then distil 3,000 grams.

ALCOOLATURE D'ACONITI.

Alcoolatura Aconiti.

Fresh young leaves of monkshood ... 1,000 grams
Alcohol, 95-per-cent. ... 1,000 "

Bruise the leaves and macerate in the alcohol for eight days; press, strain, and filter.

In the same manner is prepared

Alcoolature d'Anémone Pulsatille (Alcoolatura Anemonæ) from fresh leaves and flowers.

ALCOOLATURE DE CITRON.

Alcoolatura Citri.

Fresh lemon-peel (cut small) ... 50 grams
Alcohol, 80-per-cent. ... 100 "

Prepare like alcoolature d'aconiti.

Alcoolature d'Orange (Alcoolatura Aurantii) is prepared from fresh sweet-orange peel in the same way.

ALCOOLATURE VULNÉRAIRE.

Teinture Vulnéraire; Eau Vulnéraire Rouge.

The solid ingredients of alcoolat vulnéraire are macerated with 3,000 grams of 80-per-cent. alcohol for six days, pressed, and filtered.

APOZÈME BLANCO.

Décoction Blanche de Sydenham.

Bicalcium phosphate ... 10 grams
Powdered gum ... 20 "
Simple syrup ... 100 "
Orange-flower water ... 20 "
Distilled water to ... 1 litre

Triturate the gum and bicalcium phosphate with cold water to make a cream, add the syrup and the orange-flower water, and make up to a litre with distilled water.

APOZÈME DE COUSSO.

Apozema Couusso.

Cusso, in No. 26 powder ... 20 grams
Boiling distilled water ... 150 "
Suspend the powder in the water.

APOZÈME D'ECORCE DE RACINE DE GRENADIER.

Apozema Granati Cortex.

Pomegranate-bark, in No. 6 powder ... 60 grams
Distilled water ... 750 "

Macerate for six hours; evaporate on a water-bath to two-thirds, strain, and filter.

APOZÈME PURGATIF.

Médecine Noire.

Senna ... 10 grams
Rhubarb, in small pieces ... 5 "
Sodium sulphate ... 15 "
Manna ... 60 "
Boiling distilled water ... 100 "

Infuse the senna and rhubarb in the water for half an hour and press; add the sulphate and manna, dissolve with gentle heat, strain, allow to settle, and decant. Should produce 180 grams.

CATAPLASME.

The following are included:

Cataplasme de Farine de Lin.—Linseed meal and water.

Cataplasme de Féculé.—Potato starch 1 and water 10.

CAUSTIQUE AU CHLORURE DE ZINC.

Pâte de Canquoin.

Zinc chloride ... 32 grams
Zinc oxide ... 8 "
Flour dried at 100° C. ... 24 "
Distilled water ... 4 "

Triturate the chloride and the water in a mortar; add the oxide and the flour, previously mixed, and make into a smooth paste. Transfer to a marble slab sprinkled with starch, roll out flat, and cut into triangles or roll into cylinders. Dry in an oven, gradually raising the heat from 50° to 100°. Pre-

serve in a well-stoppered bottle containing quicklime.

CAUSTIQUE DE POTASSE ET DE CHAUX.
Caustique de Vienne; Poudre de Vienne.

Caustic potash ... 50 grams
Quicklime ... 60 "

Triturate the quicklime in a warmed iron mortar, and transfer to a dry wide-mouthed bottle; powder the potash in the cold mortar, add the lime, and mix intimately. Keep in hermetically sealed bottles. When using, the powder is made into a thin paste with 95-per-cent. alcohol.

CIGARETTES DE BELLADONE.

Cigarette Belladonæ.

Dried belladonna-leaves are shredded and made into cigarettes with paper, each containing 1 gram of the drug. Cigarettes de Stramoine are prepared with stramonium-leaves in the same manner.

COLLODION.

Collodium.

Pyroxylin ... 5 grams
Alcohol, 95-per-cent. ... 20 "
Purified ether ... 75 "

Made in the B.P. manner.

The following are also given:

Collodion Elastique.—Collodion 95, castor oil 5.

Collodion Iodoformé.—Powdered iodoform 1, flexible collodion 9.

Collodion Salicylé.—Salicylic acid 1, flexible collodion 9.

COLLUTOIRE AU BORATE DE SODIUM.

Collutoire au Borate de Soude;
Collutoire Boraté.

Powdered borax ... 5 grams
Honey of roses ... 20 "
Triturate in a mortar.

COLLYRE À LA PIERRE DIVINE.

Collyrium Lapis Divini.

Blue wound-stone ... 40 centigrams
Distilled water ... 100 grams
Dissolve and filter.

COLLYRE AU SULFATE DE ZINC.

Collyrium Zinci Sulfurici.

Zinc sulphate ... 15 centigrams
Rose-water ... 100 grams
Dissolve and filter.

COTON IODÉ.

Gossypium Iodatum.

Cotton-wool, dried at 30° C. ... 25 grams
Finely powdered iodine ... 2 "

Immerse a 1-litre stoppered wide-mouthed flask in hot water to expel air, then introduce the cotton uniformly sprinkled with the iodine, close the flask, immerse to the neck in boiling water for two hours or place in a steam-bath at 100° C. Allow to cool before opening.

CRAYONS D'AZOTATE D'ARGENT.

Pierre Infernale.

Silver nitrate ... 90 grams
Potassium nitrate ... 10 "
Triturate, melt in a silver or porcelain capsule, and mould.

Prepare in the same way pencils containing one-half, one-third, and one-fourth of their weight of lunar caustic; the last-named are specially designated Crayons d'Azotate d'Argent Mitigé.

CRAYONS DE TANIN.

Styli Acidi Tannici.

Prepared in the same way as crayons d'iodoforme.

Reviews.

Squire's Companion to the Latest Edition of the British Pharmacopœia, comparing the strengths of its various preparations with those of the United States and other foreign Pharmacopœias; to which are added not official preparations and practical hints on prescribing. By PETER WYATT SQUIRE. Eighteenth edition. 8½ by 5 in. Pp. xlii + 1417. 14s. net. (London, 1908: J. & A. Churchill.)

(Second Review.)

IN our first review of this new edition (*C. & D.*, November 21, 1908, p. 793) the characters which distinguish it from previous editions were indicated generally, and in returning to it now our object is to call attention to features which justify our previous statement that the eighteenth edition is "virtually a new work; unequaled in the English language for its treatment of practical pharmacy and pharmaceutical chemistry." Squire's "Companion" was not designed as a text-book of practical pharmacy in the educative sense; the authors have always assumed that the book is for the use of practical pharmacists and practising physicians familiar with the working details given in the British Pharmacopœia. Therefore the purpose of the "Companion" is to supplement personal knowledge and Pharmacopœia statements with (to use a happy phrase of the Right Hon. Herbert Samuel's) "the later knowledge of medical and pharmaceutical science which has accumulated" in the author's records of experience and experiments. An example or two will illustrate what is meant by this. First, we take *Liquor Arsenicalis*. Here, after a statement of the B.P. formula quantities, the characters and strength of the preparation are described, then the strength is compared with the U.S.P., P.G., and international standards. A paragraph next shows how much more easily the solution is prepared by dissolving the arsenic and alkali in half an ounce of water than in the 10 oz. prescribed by the B.P. or the 2 oz. given in the U.S.P. To the man behind the counter the "tip" is excellent, and it has to be noted that it is such hints regarding improved processes which have found their way from "Squire" into the B.P. without acknowledgment, credit, or apparent gratitude. Throughout the twelve hundred odd pages of the book which are devoted to pharmacopœial and unofficial pharmacy the suggestions and descriptions of improvements on working processes and generally in pharmaceutical practice are very numerous. A second example of the usefulness of the "Companion" we take from the formulary section, which in this eighteenth edition has been remarkably expanded, and is exceptionally rich from the medical and pharmaceutical points of view—being suggestive to the prescriber and satisfying to the dispenser. We had an inquiry for Lowndes' Cream, and the usual sources of information failed until this new edition came to hand, and on p. 633 we found:

Not Official.

Lowndes' Cream.—Ammoniated mercury ointment, 1; zinc ointment, 3; glycerin, 2; form a cream.

In another direction we find that the book has advanced much—viz., in the *materia medica* notes. These are of such a nature as to be distinctly serviceable in the practice of pharmacy, since they are the most up-to-date in regard to the adulteration and sophistication of drugs, therefore useful alike to importers, wholesalers, and retailers, but we should not be surprised to find that the notes will make the "Companion" a still more valuable text-book for students of pharmacy. The fact that it was chosen by the first prizeman in our Corner for Students competition recently gives point to this observation. It is rather a serious responsibility to recommend a book of about 1,500 pages for students to "read" by, but if the student gets someone more experienced than himself in examination requirements to go through the book, marking with blue pencil what is needed in *materia medica*, with green the essential portions of chemistry, and with red the pharmacy parts, he will not be tempted to devote time to those parts of the book that may be taken more thoroughly

as a post-graduate course of reading. Before touching upon the analytical pharmacutic chemistry sections of the volume a note should be made of the fact that the Prescribing Notes and other data and information of special service to physicians have been considerably augmented, and are so informative as to be of use also to dispensers.

Turning to the chemical monographs and notes, one of the new features which forms an inconspicuous part of the book is likely to be of great use to all manufacturers of galenicals, whether on a large or small scale—viz., the "Tests" paragraphs. The simplest of these are like the following:

Tests.—Liquid extract of *cimicifuga* has a specific gravity of 0.875 to 0.890; it contains 8 to 10 p.c. w/v of total solids and about 80 p.c. w/v of Absolute Alcohol.

Paragraphs similar to this are given in regard to all pharmacopœial fluid extracts and tinctures. They are not armchair work, but the result of years of experiment in the author's factory and laboratory. In the case of galenicals which are more amenable to chemical assay the "Tests" monograph is longer and more exhaustive. Thus for ext. cinchonæ liq. there is a page and a half; the monograph beginning with the specific gravities of commercial fluid extracts, the total solids and total alkaloids. Then comes a brief comparison of the principles of the B.P. and U.S.P. assay processes, which are next described with annotations. The fact should be emphasised that the descriptions are not a mere paraphrase of what the Pharmacopœias say, but include the observations of the author and others (with references where required), so that the pharmacist who has to carry out the processes and researchers who want to work from where other people have left off are equally assisted. In regard to chemical *materia medica* we have already stated that one of the purposes of the present edition was to compare the tests and standards of the British, French, German, United States, and occasionally other Pharmacopœias. To retail pharmacists generally this may seem a matter of academic interest rather than of practical importance, but as a fact it is really of the greatest commercial and practical value to manufacturers and merchants, who have not infrequently to make such comparisons for themselves, and often when the time of principals or their most reliable men can ill be spared. From this point of view alone the comparative work which is now presented in the "Companion" rises to the level of international service. We understand that this comparison of tests and standards has necessitated the checking in innumerable instances of statements occurring in the Pharmacopœias referred to, and much original work has thus been carried out in the author's laboratory, while in numerous instances modified tests which have been found of value are recorded in the volume. One need not go further than the monographs on bismuth salts to appreciate the nature of the exposition of pharmacopœial and commercial requirements. Under *Bismuthi Carbonas*, *Bismuthi Oxidum*, *Bismuthi Salicylas*, *Bismuthi Subnitras*, and *Liquor Bismuthi et Ammonii Citratris* we have the complete chemistry of the properties of bismuth with the detection of its impurities, besides notes on the most important literature of the subject, criticism of pharmacopœial methods which are inaccurate, comparison of tests, and original observations. All this is done without loading the monographs with references and criticisms which have ceased to be of value. The same observations could be made in respect of all the monographs; whether the "tests" refer to alkaloids or alcoholic products, to balsams or oils, to gums or resins, we find that they are rich in practicality and suggestiveness—in short, the monographs are a real companion to the Pharmacopœia in so far as they help the worker.

Much more could be said about the book, but the foregoing sufficiently indicates to British chemists and pharmacists that the volume is a unique contribution to our literature. It was supposed for a brief period that the publication of a certain bulky volume under "authority" had made unnecessary the republication of "Squire" and other popular pharmaceutical books dealing with official and unofficial pharmacy. Mr. Squire has demonstrated remarkably the fallacy of that supposition, and he has proved in an unmistakable manner that his ability, resources, and

knowledge of what is wanted have eclipsed the moon that for a short season reflected the light of many suns. His book stands as a personal accomplishment in the first place, and in the second as a service to British pharmacy.

The Card System at the Office. By J. KAISER. 9 $\frac{3}{4}$ x 6. Limp cloth, 5s. net. (London: Vacher & Sons.)

THIS is an elaborate and carefully written account of a system which is yearly becoming a more important factor in business organisation. To those who already have a card-system in use it will be helpful, but to the novice it has a tendency to make confusion worse confounded. Mr. Kaiser is so coldly technical. He writes (in numbered paragraphs—the book is not paged in the usual way) with the stern practicality of an expert, but enthusiasm does not lead him to divagate into purple patches of rhetoric. Perhaps this is as well, for the business-men to whom this book appeals will appreciate its stern economy of verbiage. The first sentence in the book is one of the longest, but it explains the whole aim and object of the author:

The object of this book is to furnish office principals with adequate means by way of explanation and illustration to enable them to work out systems suitable to their individual requirements at the office, or if they have already some system in use to help them to co-ordinate and extend it so that the whole of this office-work may have one homogeneous arrangement for its basis.

Then the author plunges into the subject with the confidence of one who has made it his life-work. After a "General Exposition" of his method he deals in turn with "Card-system Appliances," the "Card System," "Application to Office Work," and the "Key Cabinet." An "Appendix" to all this treats of "The Day's Mail," "The Daily Record," and "Effective Working of a System." The section last mentioned is the most humane part of the book, and the hints there given may very well be taken as general business-maxims, and are not confined to any particular system. Taken as a whole, Mr. Kaiser's book will be found of much benefit to office organisers. There are many illustrations scattered throughout the book (which is well produced), and the final pages are devoted to a well-prepared index.

Mineral Waxes: Their Preparation and Uses. By RUDOLF GREGORIUS. Translated from the German by CHAS. SALTER. 7 $\frac{1}{2}$ x 4 $\frac{3}{4}$. Pp. 240. 6s. net. (London: Scott, Greenwood & Son, 8 Broadway, E.C.)

THIS book deals with the production and purification of ozokerite, ceresine, paraffin, and mineral (Moutan) wax and the uses to which these products are put. In regard to the uses of mineral waxes a few pages of recipes are given for such preparations as floor-polish and shoe-polish, from which useful hints may be obtained. The book is a translation from the German, and bears evidence of its origin—the authorities and patents quoted are Teutonic. Anyone reading up the subject will find this work interesting and instructive, but will need to make good the defects and supplement the information by consulting English works on applied chemistry.

Text-Book of Physics: Heat. By J. H. POYNTING and J. J. THOMSON. 9 x 6. Pp. 354. 193 Illustrations. Third edition. 15s. (London: Griffin & Co., Ltd., Exeter Street, Strand, W.C.)

PREVIOUS volumes of the text-book have dealt with (1) The Properties and Matter, (2) Sound; and others are to be devoted to Light, Magnetism, and Electricity. The text-book is intended chiefly for the use of students who lay most stress on the experimental part of physics, and who have not yet reached the stage at which the reading of advanced treatises on special subjects is desirable. This volume on heat is a good manual for minor and major students, the work being written in a concise and accurate style, the illustrations insuring that the student grasps the experimental side of the subject. The chapters deal with (1) temperature, (2) expansion of solids, with rise of temperature, (3) expansion of liquids, (4) expansion of gases, (5) circulation and convection in liquids and gases, (6) quantity of heat—specific heat, (7) conductivity, (8) forms of energy, (9) kinetic theory of matter, (10 and 11) change of state—liquid, vapour, (12) change of state—solid, liquid, (13) water in the atmosphere, (14) radiation,

(15) theory of exchanges, (16) radiation and temperature, (17, 18, 19, and 20) thermodynamics.

Wax Craft: All about Beeswax—its History, Production, Adulteration, and Commercial Value. By T. W. Cowan. 7 $\frac{1}{4}$ x 5. Pp. 172. 2s. net. (London: Sampson Low, Marston & Co., Ltd., 32 Warwick Lane, E.C.)

MR. COWAN is one of the authorities in this country on bee-keeping, and has found the need for a book on beeswax written from the bee-keeper's point of view. The book begins with a very interesting historical account of the employment of wax in religious ceremonies and for public purposes; a short note being included on the Wax Chandlers' Company, which has been in existence from 1371. Subsequent chapters deal with the production, rendering, and refining of wax and the manufacture of comb-foundation, wax candles, and wax flowers. There is a short account of the methods of detecting adulteration of wax, and at the end over a hundred recipes in which wax is used.

New Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

American Annual of Photography, 1909. 8vo. swd. 3s. net. (Dawbarn & Ward.)

Hazell's Annual, 1909. A cyclopædic record of men and affairs for use in 1909. Edited by W. Palmer, B.A. (Lond.). 7 x 4 $\frac{3}{4}$. Pp. 677. 3s. 6d. net. Hazell, Watson & Viney, Ltd., London. [In this most useful annual the secret of grouping together in alphabetical order the most interesting points about men and topics is solved. One gets in it not only the customary encyclopædic facts, but the latest records, particularly the events of 1908, which are of great value in connecting the past with the present. The "Annual" contains, for example, the public Acts passed during the Session of 1908 up to November 23, and that for a book of 800 pages or more (including advertisements) is excellent evidence of careful editing and smart publishing.]

Laurance, L. *General and Practical Optics.* 9 $\frac{3}{4}$ x 6. Pp. 412. 10s. 6d. net. (The Orthos Press, 21 John Street, Bedford Row, London, W.C.)

The Englishwoman's Year-book and Directory, 1909. 7 $\frac{3}{4}$ x 4 $\frac{3}{4}$. Pp. 372. 2s. 6d. net. A. & C. Black, Soho Square, London, W. [The principal contents of this volume show the place taken by women in education, employments, and professions, industry, medicine, science, literature, art, music, sports, and public work, with information on legal and general matters, lists of ladies' clubs, and similar subjects. The list of medical women is a useful one, the names being arranged under towns, in the case of London under the postal districts. The article on pharmacy for women is by Miss Buchanan.]

The Writers' and Artists' Yearbook, 1909. 7 $\frac{1}{4}$ x 4 $\frac{3}{4}$. Pp. 121. 1s. net. A. & C. Black, Soho Square, London, W. [A directory for writers, artists, and photographers. Contains lists of journals and magazines, with details of articles, and illustrations required and payment made, literary agents, publishers, colour-printers, and information on similar matters. A classified list of papers and magazines is given.]

Who's Who, 1909. 7 $\frac{3}{8}$ x 4 $\frac{3}{4}$. Pp. 2122. 10s. net. A. & C. Black, Soho Square, London, W. [This interesting biographical annual is perhaps sufficiently well known without a further recapitulation of the contents, but as it yearly grows in importance it is well to remind our readers of what it contains. There are in the book, roughly, 23,000 biographies of the most prominent people in the United Kingdom, each monograph being revised by the person whom it concerns. It is hardly possible to name anyone who has done something notable, who occupies an important position, or inherits a title, and not find his or her biography in "Who's Who." It is a valuable work of reference.]

Who's Who Year-book, 1909. 7 $\frac{1}{4}$ x 4 $\frac{3}{4}$. Pp. 154. 1s. net. A. & C. Black, Soho Square, London, W. [A supplementary volume of "Who's Who," being made up of the tables which were the original nucleus of the larger work. It contains lists of ambassadors, academicians, heads of churches, clubs, members of the House of Commons, Government officials, law officers, privy councillors, railways, schools, societies, clubs, and universities, and many other matters of minor importance.]

The Drug and Chemical Trades in 1908.

IN the following review we glance over the principal features of a year which commercially has been poor. A year ago we mentioned that the outlook for 1908 pointed to restriction, following on a year of unusual activity and prosperity. The prophecy has proved true in a marked degree. Much of the trade depression which prevailed during the first nine months of the year was traceable to the effects of the American financial crisis of October 1907, and it was felt not only in the United States, but in Europe, including the United Kingdom. U.S.A. was not a buyer in the world's markets during 1908, except for actual requirements, and these proved to be small. This general want of confidence has affected many Mincing Lane articles, so that in 1908 many of them have disappointed dealers and wholesalers, as by far the bulk of the products quoted in our Trade Report gradually and persistently declined, and when any improvement was manifested owing to demand, it quickly ceased with demand. To the forward buyer it has been a year of bitter reflection and loss, as in many instances when goods were tendered the buyer found the home market lower than the c.i.f. cost price, and those who were fortunate cut their losses at once. As a rule it is the speculator who feels the loss on declining markets, but in 1908 he was conspicuous by his absence, and the legitimate buyer covering his anticipated requirements has had to suffer. Thus it is that the trade losses of 1908 on such articles as camphor, cream of tartar, citric and tartaric acids, castor oil, shellac, ginger, peppermint oil, lemon and bergamot oils, rhubarb, aniseed and cassia oils, cod-liver oil, milk-sugar, etc., which have all suffered a slump in values, must in the aggregate have been enormous. During the last three months of the year, however, there was a much better tone, and buyers placed their orders with more confidence, especially as many articles are cheap, so that on the whole there is a disposition to regard more cheerfully the prospects for 1909.

Bark and Quinine

have had a comparatively uneventful and uninteresting year, there having been an absence of speculative activity in the alkaloid owing to continued over-production of bark in Java, while the competition of Java-made quinine (large quantities of which have been produced) was intensified. The position of bark and quinine was set forth in our columns in November, but we may recall that the official price of German quinine sulphate was reduced at the end of January by $\frac{1}{2}d.$ to $8d.$ —the only alteration of the year on the part of the makers, who put through a good contract business at this price, but, as subsequent events proved, such transactions were barely profitable to the buyers, as the price has now fallen very low. The second-hand market for good German brands has been from $\frac{1}{4}d.$ to $\frac{3}{4}d.$ below that of makers throughout most of the year, values opening at $7\frac{3}{4}d.$ and closing at rather below this figure. The lowest point touched was early in October, when $7\frac{1}{4}d.$ was paid for B. & S. and/or Brunswick, after which there was a slight recovery to $7\frac{1}{2}d.$ to $7\frac{3}{4}d.$ Java sulphate, which was selling in January at $7\frac{3}{4}d.$, fell to $7\frac{1}{2}d.$ by June, reached its lowest point, $6\frac{1}{2}d.$, in September, and closes the year at $7d.$ spot. The enormous consumption of quinine is shown by the fact that at the ten auctions of cinchona held in Amsterdam this year bark containing 15,419,000 oz. of quinine sulphate was disposed of, as compared with 16,234,000 oz. in 1907, the latter figures exceeding all previous highest records. The average unit was, however, much lower, opening at 3.42c. in January, rising to 3.53c. in February, falling slowly with slight reactions to 3.12c. (its lowest point) in September, and finishing up at 3.13c. The nearest approach to these figures was in 1896, when the unit moved between 2.25c. and 3c. There is again a steady increase in average quinine content of the Java manufacturing barks, the 1908 figures ranging from 6.14 per cent. to 6.53 per cent., as compared with 5.68 per cent. to 6.51 per cent. in 1907. One of the features this year upon which dealers base an improvement in the outlook for 1909 is the fact that the shipments of bark from Java have declined from 1907 by almost two million Amsterdam lb. during the

eleven months ending November, but at the moment the competition on the part of Java sulphate at prices materially below German makers is a factor which cannot be overlooked. Until this competition is exhausted or restricted in some way improvement will be deferred. During the year proposals to form a cinchona syndicate in Java have been put forward, but the plan appears to have been too ambitious for serious consideration. Finally, attention may be called to the fact that the London stock of quinine has been reduced by 234,320 oz. during the eleven months, and now stands at 3,324,500 oz.—a stock which has not varied much for several years.

Camphor.

The outstanding feature has been the transference of the marketing agency of Japanese monopoly camphor from an English to a Japanese house under the direct supervision of the Government. This has given rise to much criticism. The course of the Chinese crude camphor market has been steadily downwards, the production having been stimulated by the fact that the monopoly figure has been considerably above that of China throughout the greater part of the year. It was not until November that the monopoly quotations were suddenly brought more into line by a reduction of 30s. to 35s. per cwt. to 135s. to 140s. c.i.f. as to grade. The shrinkage in the amount of business done by the Japanese Government may be judged by the fact that the exports from Japan fell (compared with 1907) by over one million kin (about 12,000 cwt.) during the eight months ending August. In January Chinese crude camphor opened at 175s. c.i.f. (buyers) and 185s. (sellers), but by March good business was done on the spot at 160s. That month showed a slight improvement, but in April and May heavy arrivals sent down values, and in June 135s. was paid both for spot and c.i.f. During July and August prices advanced to 157s. 6d. c.i.f. and 162s. 6d. spot, but in November-December values fell to 130s. spot and 135s. c.i.f. In sympathy with the crude, prices of refined camphor have steadily declined, the official quotations for English bells being about 9d. per lb. lower on the year, and a similar decline has taken place in Japanese tablets and slabs, the former, which stood at 2s. 5d. c.i.f. in January selling at 1s. 5 $\frac{1}{2}d.$ c.i.f. in October. A severe blow has been dealt to the synthetic camphor industry by the lower prices of the natural product and the action of the Japanese Government in cutting down prices. As recently reported several synthetic camphor companies have gone into voluntary liquidation, and much English and French capital has been lost, as it is impossible to compete profitably with the natural product on 1908 values. The decision of the American Federal Courts declaring synthetic camphor admissible as crude duty free and not as refined camphor subject to a tax of six cents per lb. gave rise to an interesting controversy.

Cascara Sagrada

has proved comparatively uninteresting, with prices on a lower level than in 1907, in spite of the fact that there was a short peeling in the 1908 season. As usual the persistent offerings of parcels at auction partly without reserve have disturbed the spot market, and the fact that the London stock has been more than ample for consumers' requirements has helped to keep values down. During the first half of the year prices declined from 40s. to 35s. (with auction sales below these figures) and in August a large business was done at 35s., but from that point there was a slight improvement. The reports which have been assiduously circulated demonstrating a material shortage in the production have had practically no influence on speculators, and no serious attempts have been made to raise prices as in former years, this no doubt being due to the unsatisfactory state of the American drug-trade (happily now improved), which called for a policy of retrenchment. At the close, prices are steady, spot and c.i.f. offering at 37s. 6d. for new, and at 40s. to 42s. 6d. for old, everything pointing to better prices in the spring.

Cod-liver Oil.

The production of Norwegian cod-liver oil surpassed in 1908 the yield of any previous season, the total output of all

the fisheries, amounting to 59,100 hect., or 51,000 barrels of steam-refined oil, which, together with a Norwegian stock of about 15,000 barrels carried over from 1907 (in itself a good year), made a total of 66,000 barrels for consumption during 1908. In January the price of finest non-freezing oil opened at about 65s. f.o.b., a figure that was considered very reasonable even in the face of good prospects for a rich catch, and the market kept steady until March, when the reports from the fishing centres announcing that the liver continued as fine as at the beginning of the season, caused prices to decline to 60s., and in April and May, when it became evident that all previous records would be broken, values declined to their lowest point—52s. to 53s. These values continued with insignificant fluctuations during the entire fishing period, and practically throughout the summer and autumn. The unprecedented output and low prices have, however, led to a good consumptive demand, as may be judged by the fact that the exports from Norway have been commensurate with the larger output. From Bergen alone there were exported to October 1, 1908, 21,824 barrels, against 13,650 barrels in 1907; and from Alesund, up to December 1, 14,680 barrels were exported, against 16,693 barrels in 1907. It is quite possible, therefore, that by the end of the year the exports from the whole of Norway will not be far short of 60,000 barrels, which, if correct, will leave about the same quantity to be carried over as last year—namely 16,000 barrels. The year's business has by no means been remunerative to Norwegian producers, who complain that the extremely low prices ruling have left little margin of profit, because the cost of refining and the expenses at the fishing centres remain exactly the same whether the oil is cheap or dear. Several attempts have been made to advance prices, but they were not successful, and it was only during the past month that a decidedly firmer feeling set in, holders refusing to sell at 55s. f.o.b. It is unwise to prophesy in regard to the future of so speculative an article as cod-liver oil, but after looking over the records of the previous fifteen years' catch and the ruling prices, we are inclined to the belief that values next year will be on a higher level, if the present rate of consumption is maintained. As regards Newfoundland oil, the amount of business done has been extremely small, owing to the superabundance and low price of Norwegian of excellent quality.

Crude Drugs.

The monthly returns dealing with the movements in crude drugs and allied articles support the statement that business was on a smaller scale in 1908. Taking fifty of the leading articles, we find that during the eleven months ended November the imports of nineteen have increased and thirty-one have decreased. As to deliveries in the same period, only twelve articles showed an increase and thirty-eight a decline. Of the stocks of the same fifty articles, twenty-seven show an increase and twenty-three a decrease. In noting a few of the principal fluctuations in crude drugs we find Cape aloes has been more plentiful owing to larger exports, but prices on the whole have been well maintained. At the beginning of 1908 good quality realised 35s., rising to 36s. 6d., their highest point, in March, which price was frequently paid up to July. Prices fell away that month, and by November 27s. 6d. was paid for firsts, after which there was a rally to 29s. in December. Zanzibar skin aloes has been scarce, selling at between 82s. 6d. and 87s. 6d. for good, and for Socotrine in kegs values have been steady at practically 90s. throughout. Curaçao aloes in gourds has sold at 80s. and over on several occasions for fine liver, and for boxed Curaçao prices have varied from 48s. to 67s. 6d. for fair to good liver. Areca has been in over-supply, and has declined from 25s. to 15s. Imports of Persian Gulf asafetida have been smaller, 97s. 6d. being paid on one occasion for free almonds. Balsams of Peru and tolu and copaiba have all declined in value. The Central and South American copaiba have been the subject of keen competition, the demand being principally for Maracaibo in preference to the higher-priced Maranhão, which, however, is said to be the only one suitable for druggists' requirements. The fact remains, however, that Maracaibo, the quality of which has improved, has to a great extent displaced Maranhão on the London market. It has also to be noted that whereas Hamburg formerly supplied London with cheap copaiba, the bulk of it is now

shipped direct from New York. Values this year have gradually declined, from 2s. 6d. in January-February to 1s. 10d. in November, but owing to scarcity there was a recovery in December to 2s. 1d. Imports of benzoin have fallen away by almost a thousand cases, and the deliveries by almost a similar amount; despite this fact, prices on the whole have been lower, fine Sumatra seconds selling on several occasions at 8l. 15s. Siam has been excessively scarce, up to 26l. and 26l. 5s. per cwt. having been paid for selected almonds, and for Palembang, imports of which have been small, values have ranged between 35s. and 60s.; glassy Penang has disappeared from the market. Round buchu has fluctuated between 8d. and 11d., but the quality represented at the bulk of the auctions still shows a tendency to fall off owing to the imperfect method of collection and preparation for the market. Calumba has been at a low figure throughout, and although the drug has been comparatively scarce, its consumption has also diminished. Bombay cannabis indica has varied between 4s. and 5s. 3d. per lb., the demand at these prices being but small; on the other hand, moderate quantities of East African have been sold without reserve at between 1½d. and 6½d., the bulk going at between 2d. and 3d.—values which do not pay the importer. Cardamoms have, as usual, fluctuated considerably, and although the Ceylon exports to all ports have fallen off by about 100,000 lb. during the eleven months, prices have not appreciated to the extent anticipated, there having been but little demand from the United States. Larger quantities of "green" cardamoms have been offered, but they are not appreciated. Cascarilla has been very dear, supplies being well under control. Ceylon coca-leaves, mostly of Huanuco character, have sold readily at between 5½d. and 9d., this description having almost displaced the Huanuco and Truxillo leaves so far as London is concerned. Java, too, has devoted more attention to coca, Amsterdam being the chief outlet. Colocynth has been extremely cheap. Croton seed seldom figures at auction, and the same may be said to a less extent of cubebs, which have lately been driven up to a famine price. Business in cubebs was done in January at 55s. for genuine; to-day the price is 100s. Dragon's-blood is one of the few articles showing an expansion, imports and deliveries having exceeded those of the past five years; most of the business revolved between 11l. and 11l. 10s. for good reboiled Singapore lump, but 13l. to 13l. 7s. 6d. was occasionally paid; so-called Zanzibar drop has declined. Imports of elemi have been spasmodic, 50s. representing the value of good on several occasions. Persian and China galls have declined, but gamboge prices have been well maintained at between 14l. 10s. and 15l. 17s. 6d., although 16l. 10s. was paid at one auction for good Siam pipe. Railway developments in Hayti have led to largely increased imports of guaiacum resin, many trees having been uprooted. It is therefore suggested that eventually supplies from this source will cease; the consumption, however, is but small, and with the heavier supplies prices have declined. Soudan acacia-gum has been steady, half-hard sorts selling throughout at from 34s. to 36s.; some of the East Indian gums were scarce during the year. Most honey crops have been smaller, and prices have been on a higher scale, between 30s. and 35s. representing good liquid qualities of Jamaica. California has been scarcer and dearer, but large parcels of Honolulu (selling at from 25s. to 38s.) have been offered. Hydrastis has been excessively dear at between 8s. 3d. and 8s. 8d. per lb., which is even higher than in 1907. There have been no violent fluctuations in ipecacuanha, and prices are lower. During the first half of the year values of Matto Grosso were steady at between 5s. 3d. and 5s. 6d., and in one instance only was 6s. paid publicly; prices gave way slowly from July onwards, reaching 4s. 10d. to 5s. in December. While the imports of Matto Grosso have been practically the same as in 1907, only eighty-two bales of cultivated Minas were imported. There was also a falling-off in the shipments of East Indian, only ninety-seven bales having been imported, as against 240 in 1907. Quality has also slightly fallen off, but as a rule it has commanded a premium of from 3d. to 4d. more than Matto Grosso. Imports of Cartagena ipecacuanha shrank from 178 to fifty-nine bales, and values ranged between 4s. 2d. and 4s. 6d. Jalap has been scarce, high-testing root being in extremely limited supply, and prices rising, especially from October

to December. Kino has receded more than ever into the background, and with larger arrivals prices have declined fully 3*d.* on the year. Kola has met with a steady sale, but at extremely low rates. Menthol is out of fashion as a speculative counter, and values have fluctuated in narrow limits, the spot price of Kobayashi opening in January at 7*s.* 2*d.* and closing the year at 7*s.* Tonquin musk-pod is 10*s.* lower on the year, the market having declined from 80*s.* to 70*s.* per oz. for first pile, and Russian Cabardine is about 4*s.* cheaper. The myrrh market has been overstocked, the bulk being Somaliland gum, which commands relatively lower prices than genuine Aden myrrh. Nuxvomica was exceedingly scarce early in the year, 14*s.* being paid in January, but subsequently large arrivals altered the position entirely, with consequently cheaper prices for strychnine. The chief descriptions of rhubarb have declined, especially common round High-dried, which sold at 10*d.* in January and at 5*d.* to 5½*d.* in November. The decline in Shensi and Canton was slight in comparison. It has been another wonderful year for sarsaparilla, but values of genuine grey Jamaica were lower than in 1907, that description having been more plentiful; 1*s.* 8*d.* represents the average price of the year, 1*s.* 3*d.* and 2*s.* 1*d.* being the highest and lowest. Native-Jamaica has been steady at 1*s.* to 1*s.* 3*d.* for fair to good bright red, and for Lima-Jamaica 1*s.* 3*d.* to 2*s.* has been paid, values declining 3*d.* in the second half of the year. Senega also depreciated from 2*s.* 2*d.* to 1*s.* 11*d.*, the market having been generally dull, competition sharp, and supplies free. Tinnevelly senna still excites keen attention at auction, and judging by the quantities offered, the market has been nicely fed or manipulated by the importers, who have consistently avoided anything in the nature of a glut. Owing to the larger quantities of Alexandrian senna prices more closely approximate to those of Tinnevelly. Angostura tonka-beans have been very dear, and in Jamaica beeswax there has been little variation, prices fluctuating between 7*l.* 7*s.* 6*d.* and 8*l.*, and the bulk of the Madagascar and Zanzibar has been sold at from 6*l.* 10*s.* to 6*l.* 15*s.* per cwt. As to minor drugs, which are mostly sold privately, Belgian chamomiles were much cheaper, beginning the year at 50*s.* to 85*s.* and ending at 37*s.* to 45*s.*, but as prices go lower qualities become poorer. English dandelion was 70*s.* to 75*s.* and foreign 55*s.* to 60*s.* during the first four months, but after the spring crop values began to fall, and are now a little over half their values. Gentian was selling at 25*s.* in January-February, but during the summer it fell to 22*s.* spot, but is now firmer. The old-time cheap prices for belladonna no longer exist. Opening at 75*s.* spot in January, it fell to 67*s.* 6*d.* in May, since when it has remained at 60*s.* to 65*s.* spot and 50*s.* to 57*s.* 6*d.* c.i.f. as to quality. A small box of English ergot showed itself for the first and last time at auction, selling at 1*s.*, and costing somewhere in the region of 3*s.* per lb. Russian opened at 1*s.* and Spanish at 1*s.* 3*d.*, then, with a gradual decline, 9½*d.* and 1*s.* were quoted in May, and, after hovering around 1*s.* and 1*s.* 2*d.*, finished up in December by being firm at 1*s.* 2*d.* and 1*s.* 3*d.* respectively. Annatto-seed has been very scarce and of poor quality, 3*d.* to 5*d.* being the values, and closing at 4½*d.* to 5*d.* for poor. The Morocco crop of coriander being reported a failure, prices have hardened. The value of fennel has remained practically unchanged throughout at from 18*s.* to 22*s.* The reports of a small or no crop of fennugreek caused prices to open high, 10*s.* 3*d.* being paid in January, but in May spot values had fallen to 9*s.* 6*d.*, and firmed towards the end of the year at 10*s.* to 10*s.* 6*d.* Guinea-grains have been in poor demand throughout, although stocks have been small. Quillaia was slow of sale at 29*s.* until October, when, with a prospect of small stocks, it was bought up by one firm, who doled it out at increasing prices, commencing at 36*s.* and reaching 42*s.*, but at the close 29*s.* c.i.f. for forward delivery is quoted. The chief feature in West Indian tamarinds was the low price at which the new crop opened at, and, with plentiful arrivals, prices rapidly and persistently fell. Barbados sold in May and June at 15*s.* in bond and Antiguas at 14*s.*, but in September the ruling prices were 10*s.* 6*d.* and 9*s.* East Indian black opened steady at 13*s.*, but fell away to 11*s.* 6*d.* in May, but, the old crop being cleared, 21*s.* was subsequently paid for small lots. New crop arrivals in November and December brought the price down to 13*s.* 6*d.*

Essential Oils.

There have been few interesting or noticeable features in this department, business having been disappointingly slow, and speculation considerably curtailed, prices on the average being cheaper than in January. The Chinese essential oils of aniseed and cassia have been greatly affected by the very low price of silver. The fluctuations in Ceylon citronella oil have been quite unimportant at between 1*s.* and 1*s.* 2*d.* per lb. spot and 10½*d.* to 11*d.* c.i.f. Java citronella oil has been produced on a larger scale than heretofore, but the price is considerably higher than that of Ceylon oil. Lemongrass oil has again been very cheap, parcels selling without reserve in May at 1½*d.* to 1½*d.* per oz. for 70 to 76 per cent., at 2*d.* for 75 per cent. in July, at 1½*d.* for 60 per cent. and 1¾*d.* for 75 per cent. in October, while November and December values were 2*d.* for 75 per cent. and 2½*d.* for 79 per cent. citral. Under the influence of an abundant crop of lemons and over-production, the price of oil has steadily declined in a very depressing manner, to the great concern of Sicily, where the aid of Government has been invoked to assist agriculturists and proprietors, much to the chagrin of commercial interests. The formation of the Camera does not at present extend to lemon oil, but its operations may be easily so extended by royal decree. Spot prices fell away by about 50 per cent., opening in January at 6*s.* 6*d.* and closing at about 3*s.* 3*d.* to 3*s.* 6*d.* [Since the above was written the situation is entirely altered owing to the Messina calamity.] During the early months of the year bergamot oil declined from 14*s.* 6*d.* to 10*s.* 6*d.* c.i.f., but in August there was a decided upward movement, and it is possible values will be maintained on a higher plane than anticipated. The output of Bourbon geranium oil was larger in 1908, and prices declined, while Algerian oil has also been plentiful. There has also been a large crop of French lavender oil which has met a falling market. Neroli, on the other hand, has been dear, owing to drought. The prices paid for eucalyptus oil leave practically little or no profit to distillers, consequently there is a shortage, and importers find it difficult to fill orders at the low bids cabled. Prices until November varied but little at between 1*s.* and 1*s.* 1*d.* for B.P. oil, at from 1*s.* 1½*d.* to 1*s.* 2*d.* for high percentage, and 1*s.* 1½*d.* to 1*s.* 2½*d.* for Globulus, but at the close there is a hardening tendency as a result of the shortage, 1*s.* 1½*d.* being asked for B.P., 1*s.* 2½*d.* for 68 to 70 per cent., and 1*s.* 4½*d.* for Globulus. Quiet conditions have ruled in American peppermint oil, prices being about 6*d.* lower on the year. In January good brands of Wayne County were selling at 6*s.* 9*d.*, rising to 7*s.*, in April, after which they declined to 6*s.* 3*d.*, by August, touching its lowest point, 5*s.* 9*d.* in October, after which it improved to 6*s.* 3*d.* in December. Bottled oil (H. G. H.) has had a fall of 1*s.* 8*d.* as compared with January, but still its value is out of proportion to that of "tin" oil. Opening at 10*s.* 11*d.* it advanced to 11*s.* 3*d.* by March, remaining at 10*s.* 9*d.* and 11*s.* during the next four months, falling in October to 8*s.* 9*d.*, and rising to 9*s.* and 9*s.* 3*d.* in December. The consumption of peppermint oil has fallen off both in the United States and on this side. Japanese dementholised oil has undergone comparatively little change, fluctuating between 4*s.* 3*d.* and 4*s.* 10*d.* spot, and 4*s.* 3*d.* and 4*s.* 6*d.* c.i.f. for Kobayashi. Although there has been a considerable falling off in production a large quantity was left over from 1907. The production of Bulgarian otto of rose was quite equal to that of 1907, in spite of which adulteration has been as rife as ever. Prices, however, have ruled on a lower basis.

Fine Chemicals and Alkaloids.

Business in this section has been characterised by a fair number of price fluctuations in articles controlled by so-called conventions, among which we place bromides, cocaine, glycerin, and morphine as leaders. In January the makers of bromides reduced the price of the potassium salt to 6½*d.* (with falling clause), and other salts in proportion, at which a large business was done. The official quotation remained at this figure until December, when, as the result of an understanding between the German and American producers, the price was advanced to 10½*d.* net, makers not undertaking contracts. Serious disturbances occurred in cocaine early in the year, when

as a result of the breakdown in the convention at the end of February owing to the advent of a new maker prices were reduced on four occasions—from 9s. 5d. to 6s. per oz. for hydrochloride. Makers instituted a falling clause protecting buyers for the hitherto unheard of period of nine months, which led to so large an amount of speculative business that makers immediately found themselves compelled to advance prices to 6s. 8d., and in May a further rise to 7s. 4d. took place owing to the higher price of crude. In October 8s. was quoted by several makers, which is the nominal price to-day. Second-hand holders have underquoted the makers throughout. The restrictions on the consumption of cocaine again extended in 1908, but there does not appear to be any appreciable decline in its use. Morphine has closely followed the rise and fall in opium, there having been seven alterations, leaving values 6d. cheaper on balance. In April a new departure was made by the institution of a falling clause on contracts, which, while being a concession to the wholesaler, was unsatisfactory to the speculator. In November another feature was introduced when makers rearranged their scale of prices whereby the minimum price is obtainable on a 1,000-oz. contract (formerly 3,000 oz.), and six months allowed for delivery of 175-oz. contracts. These changes were with the object of stimulating contract business. Codeine advanced 8d. on two occasions in June, and 5d. in December, against which has to be placed three declines of 8d. The scarcity of glycerin during the second half of the year has been a prominent feature, and prices have risen rapidly, being about 14l. 10s. per ton dearer than in January. A much decreased production owing to the depressed condition of the soap trade, and an enormous expansion in the South African demand for dynamite purposes is mainly responsible for the famine. Prices of citric acid have steadily declined from 1s. 7½d. to 1s. 3d. owing to lack of important demand and the easier feeling in citrate of lime. In July no English was available from makers owing to the reports of an export tax on citrate of lime, amounting to the equivalent of 5l. per pipe. This became operative in October, but its success as a means of placing the citrus products industry on a prosperous footing is by no means assured. At the close the position is entirely altered as the result of the Messina calamity. Tartaric acid has again moved with exceedingly narrow limits, but prices, which are ½d. easier than in January, have been very cheap throughout and are almost at lowest record. Cream of tartar has registered an almost continuous decline, averaging 1s. per cwt. per month, 98 per cent. foreign powder being worth 74s. 6d. to-day as compared with 86s. 6d. in January. Oxalic acid is ½d. cheaper. Values of salicylates have remained unchanged, but acetylsalicylic acid has sold at lower prices as the result of keen competition. Chrysophanic acid is quite 2s. 6d. per lb. dearer, suitable araroba having been scarce. Bismuth metal has remained unchanged at 6s. 6d. per lb., and the same may be said of the salts, the demand for which has been well maintained. A concession to buyers was given in November, when they were allowed three months in which to take up one cwt. contracts. Caffeine advanced once (in October) as the result of a closer combination with one of the large German makers. Crude iodine has remained unchanged at 6d. per oz., and the only occasion on which iodide of potassium altered was in March when a reduction of 7d. was made from 8s. 6d. to 7s. 11d., at which figure British make has been steady. Most of the year Japanese make has been selling at a few pence below the combination price, but during the past three months this outside competition has practically subsided. Lithia salts have sunk to an extremely low figure as the result of intense American competition and the entry of another maker in the field. The consumption of the salts appear also to have declined. Phenacetin has barely moved from 2s. 6d. per lb. all the year. Several important alterations were made in quicksilver, which leave values 5s. higher than in January, the lowest point touched being 7l. 17s. 6d. in August, and the highest 8l. 10s. to-day's price. Mercurials do not now closely follow the metal, about the only advance being one of 1d. per lb. in October. San-

tonin has remained where it was when prices were reduced in December 1907, from 18s. to 9s. per lb., but owing to scarcity as much as 13s. has been paid from second-hands. Saccharin was reduced by 10s. per lb. in May, when the sugar-duty was lowered. Strychnine was reduced several times as the result of American competition and free arrivals of nux vomica. Price-cutting in thymol has been rife on the Continent. Sugar of milk has been very dull and cheap, competition among makers having cut prices to ribbons. The lowest price touched was in June, when a parcel of American sold at auction without reserve at 35s. to 36s.; privately, prices have ranged from 45s. down to 39s., but last week we were able to announce a considerable advance.

Heavy Chemicals.

The year opened with a fairly good demand for heavy chemicals, both of a main and miscellaneous character, but this condition of affairs was only of very short duration, and if there is one feature which may be said to have been more regular and prominent than any other it is that of the general quietness which has ruled throughout the whole period. In all years, of course, the market suffers during the usual holiday periods, but the quiet trade has not this year been confined to such seasons, but has been general. Under such conditions one might have expected that a general decline in the values of most products would have taken place; but this has not really been the case, for the policy of restricting production to the near neighbourhood of requirements has been more and more adopted, and it is a principle which is likely to gain in favour. The decline in the export trade has been of a very heavy character, and much more important than the falling-off in home trade requirements, the latter having been, on the whole, very fair when all adverse influences are taken into consideration. It is pleasing to remark, however, that the tone at the present time is more hopeful, and a distinctly better trade seems to be anticipated during the coming year. Very shortly after the turn of the half-year inquiries were put forward with regard to 1909 deliveries, but it was really well on into September before much of importance was actually concluded, and, as a matter of fact, negotiations with regard to such business have dragged this year much more than usual. With regard to those products taken under the head of Alkali Produce there is little need for special comment. Soda compounds as a whole have been in diminished demand, but values of caustic soda, ammonia alkali, and soda crystals and chlorates have been well maintained. Saltcake has not fluctuated so much as usual and has practically ranged about 42s. 6d. throughout. Yellow prussiates, with the exception of periods here and there, have been in only moderate request and show a decline on the year. Business in hyposulphite of soda has been of a disappointing character, though values have not fluctuated much. Bleaching-powder has also suffered by the condition of consuming trades, and prices have been somewhat irregular. Some of the earlier contracts for 1909 were booked at advanced figures, but later on exceptionally low figures were accepted for important contracts. Acids generally quiet and demand disappointing. The consumption of alumina products has been lower, but prices have kept up, and crystal alum shows a gain of about 5s. on the year. The competition in this branch of the trade seems to be somewhat keener just now, but it hardly seems probable that any appreciable decline will take place in prices, for, considering costs of manufacture, present figures are very low. Barium products, although perhaps not in such heavy demand as during last year, can hardly be described as having been disappointing. Increasing scarceness of the main raw material for manufactured products—viz., the mineral carbonate or witherite—has kept prices very steady, and higher prices, too, are being asked for the manufacturing qualities of the mineral sulphate of barytes, and consequently the tendency in this branch is towards advancement rather than otherwise. Bichromates of potash and soda, as regards ruling values, finish the year as they began, owing to agreement entered into between British and foreign manufacturers; they have, however, fluctuated during the year, for the discount allowance was during March increased from 2½ per cent. to 7½ per cent., and later on to 10 per cent., reverting back afterwards, as

already mentioned, to $2\frac{1}{2}$ per cent. Green copperas almost throughout has been in strong demand at full prices. Zinc and magnesium salts have been in fair consumptive request without appreciable fluctuations, and similar remarks apply regarding superphosphates and recovered sulphur. Sulphocyanides have all along been dull, but the present tendency seems towards improvement. Benzols, on the whole, quiet, with declining tendency in values. Sulphate of ammonia during the first few months of the year held a very firm position indeed, the regular and strong demand keeping the product in scarce supply. About June and during July, however, sharp declines took place, with some improvement of rather an irregular character following during August. Present position is quiet. When one considers that the demand from Japan has been so much on the quiet side, it is perhaps somewhat surprising that the market has held together so well, but increased request from other sources has been largely responsible for this. The trend of this market, however, is somewhat difficult to forecast, in view of the increasing supplies which may be expected. White sugar of lead declined about 6s. during the first six months of 1908, but subsequently advanced about 1s. 6d. Arsenic declined from 24l. in January to about 14l., and borax has been steady and unaltered throughout.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., December 31.

THE holidays, stock-taking operations, and settlements incidental to the end of the year have absorbed the usual amount of attention, so that business has been strictly confined to current wants. The principal topic in the markets is, of course, the Italian earthquake; and, as many London merchants have large and close commercial relations with Messina, much anxiety prevails as to the fate of their principals, but judging from the cabled reports there are few survivors left. The position in regard to lemon oil is referred to on another page; meanwhile the range of quotations on a disorganised market is wide, at, say, from 5s. to 7s. 6d. per lb., according to idea of seller; business has been done at both these figures, and in bergamot oil 13s. 6d. has been paid for 38-per-cent. linalyl acetate, but extreme prices are now asked, viz.—20s. to 25s., and it is even said one holder has cleared his stock at the higher figure. It may be said that Reggio (which town no longer exists) is the principal centre of the

cream of tartar still hold good. The price of English *camphor bells* is unaltered at 2s. 2d. per lb., but, in order to meet competition where necessary, a reduction of 1d. per lb. has been made on *flowers*, 5 cwt. lots of which are quoted at 1s. 11d. per lb. A sale of 50 piculs Chinese crude *camphor* is reported at 130s. per cwt. spot, but sellers to arrive ask 135s. c.i.f. *Silver nitrate* has advanced $\frac{3}{4}$ d. per oz. to 1s. $3\frac{1}{4}$ d. net for quantities. *Quinine* is unaltered, German makers quoting 8d., second hands $7\frac{1}{2}$ d. to $7\frac{3}{4}$ d., and Java 7d. per oz. The auction of *cinchona* to be held at Amsterdam on January 21 will consist of 7,342 packages *Ledgeriana* and Hybrid, 2,059 packages *Succirubra* and Hybrid (834 cases, 1,225 bags), and 21 packages *Robusta*, or 9,422 packages in all. The stock of bark at Amsterdam on December 29 consisted of 5,817 packages Government bark and 16,418 packages private bark, making a total of 22,235 packages. At the above auction 184 packages Java *coca-leaves* will also be offered. *Castor oil* of Hull make is quoted 23l. 10s. for firsts and 22l. for seconds, January to June 1909 delivery being 23l. 10s. and 22l. per ton respectively ex wharf London. In Liverpool good seconds *Calcutta* is quoted $3\frac{1}{2}$ d. per lb., second pressing French $2\frac{3}{4}$ d., and first pressing Belgian $2\frac{1}{4}$ d. per lb. on the spot. *Copper sulphate* is unaltered in Liverpool at 20l. 10s. per ton for prompt and 20l. 17s. 6d. to 21l. 2s. 6d. for January-April delivery. *Ergot* has a firmer tendency with rather more demand at 1s. 3d. c.i.f. for Spanish and 1s. $1\frac{1}{2}$ d. to 1s. $1\frac{3}{4}$ d. c.i.f. for Russian. An arrival of 60 bags split Spanish *gentian* has taken place from Bilbao; on the spot 20s. 6d. to 20s. 9d. is quoted, and 20s. c.i.f. to arrive. *Menthol*, with the turn of the year, is expected to improve; most holders ask 7s. 2d. to 7s. 3d. for Kobayashi, but a limited quantity could still be had at 7s. spot. American *peppermint oil* in tins is firm at 6s. 3d. per lb., but one agent quotes 6s. 9d. for shipment up to March. Advices from New York still continue very strong, indications pointing to better prices with the turn of the year. Japanese is quoted at 4s. 9d. c.i.f. to arrive for Kobayashi. English distillers of *cubeb oil* have advanced their price by 6d. to 8s. per lb., and a reduction of 6d. has been made in *cumin oil* to 14s. 6d. per lb. *Star aniseed oil* is quoted at 4s. 1d. per lb. c.i.f., but with a firm offer business could probably be done at 1d. less. In regard to *opium*, a Smyrna despatch of December 18 states that the sales amount to 20 cases for export, comprising five cases new crop at 116 piastres, or 12s. 10d.; and 15 cases old "extra" Karahissar at 120 piastres, or 13s. 4d. per lb. c.i.f. terms European ports. The damage caused by frost appears to have been exaggerated. Meanwhile holders are maintaining quotations, but business is almost at a standstill. The arrivals amount to 1,956 cases against 1,311 cases at the same time as last year. A further despatch from Smyrna states that inquiries by local buyers for England and the United States have met with no encouragement, and the high pretensions of holders caused buyers to retire. Quotations for eligible raw material are nominally from 12s. 6d. to 13s. 6d. for new crop, and at from 13s. to 14s. 6d. for old, but the position is such that buyers will not respond to the above quotations, and the market is likely to remain quiet until better weather conditions set in for the sowing, or until buyers are forced to buy at the advanced rates asked. The London market for *opium* remains firm, with small sales of second Tokats at 16s., the value of Smyrna druggists' being about 13s. 6d. per lb. In Persian, sales of 9.75 per cent. have been made at 13s. 9d., and for 10-per-cent. the nominal price is 14s., there being no sellers; bids of 14s. for forward delivery have not been replied to, the inference being that Persian stocks are small. Writing on December 21 our Bergen correspondent states that the market for finest non-congealing Lofoten *cod-liver oil* is quiet at 59s. per barrel c.i.f. terms. Only a few sales are being effected, but holders are hoping for a better demand and higher prices early in the New Year. The exports from Bergen to date amount to 22,080 barrels, against 13,271 barrels at the corresponding date of 1907. An arrival of 278 bales of Tinnevely *senna* has taken place, which will be offered with other lots at the auctions on January 14. Holders of Barbados *tamarinds* are asking the advanced price of 12s. 6d. per cwt.; we note the arrival of 140 casks of East Indian from Calcutta. Angos-

Higher	Firmer	Easier
Bergamot oil	Cod-liver oil	Camphor-flowers
Citric acid	Ergot	Cumin oil
Cubeb oil	Tamarinds (W.I.)	Shellac
Lemon oil		
Petroleum		
Silver nitrate		

bergamot trade. Other articles which have been affected by the Sicilian disaster include squill, liquorice juice in blocks and sticks. Sellers of *citric acid* have practically all withdrawn from the market pending developments; urgent requirements have been filled at 1s. 5d. to 1s. $5\frac{1}{2}$ d. and the makers are not quoting, prices being nominal at 1s. 6d. to 1s. 7d. for English. The prices of citrates are unsettled at the moment and quotations have been withdrawn. *Tartaric acid* is unaltered at $10\frac{3}{4}$ d. for English and $10\frac{1}{4}$ d. for foreign, and our previous quotations for

tura tonka-beans are lower in New York on account of competition among dealers, and quotations have been reduced to \$1.10 to \$1.20 per lb. No auctions of spices have been held, but, privately, firmer prices have been paid for pepper, Singapore selling in quantity at 3d. for January-March c.i.f. d/w; fair is quoted at 3½d. spot; white is also firmer, with sales of December-January and January-February at 4½d. c.i.f.; fair on the spot is quoted per cwt. 4½d. Pimento is slow with sellers at 18s. 9d. c.i.f. for December-January, and Zanzibar cloves are quiet and unaltered, the small sales including January-March shipment at 4½d. c.i.f. d/w. Russian aniseed is unchanged in price at 18s. to 19s. per cwt. There is a firmer tendency in canary-seed, but as transactions have been small quotations cannot be reported higher. Ordinary qualities of Turkish, River Plate, and Morocco are worth 30s. to 32s., and good Morocco 34s. per quarter. Good Spanish is offering at 70s., and fine at 77s. 6d. to 82s. 6d. per quarter. Caraway-seed is steady at 38s. to 40s. per cwt. for ordinary to good Dutch on the spot. Coriander-seed is slow of sale, but prices are unaltered at 11s. to 12s. per cwt. for wormy to good Morocco, 13s. 6d. for Russian, and 18s. to 20s. for English. Cumin-seed is firm at 42s. 6d. to 44s. per cwt. for Morocco and Malta. The quotation for Morocco Fenugreek-seed on the spot is 9s. 6d. per cwt., and linseed is steady at 48s. to 50s. per quarter for fine qualities, and 44s. to 46s. for common descriptions. Shellac is quiet and easier, fair free TN Orange offering at 82s., and to arrive at 78s. c.i.f. for January-March shipment. Turpentine is steady at 29s. for American, and petroleum has advanced ¼d. per gal. all round, ordinary refined American being 7d. to 7½d., water-white 8d. to 8½d., and Russian 6½d. to 6¾d. The Ionone patent suit, which has been pending for several years between the Haarman-de Laire-Schaefer Co., the owners of the Ionone patent, and Van Dyk & Co., of New York, has just been decided (reports the "New York Commercial") by Judge Ray, of the United States Circuit Court, in favour of the plaintiffs, and the patentees are now expected to pursue all infringers. The arrivals of benzoin in London have been fairly heavy this week, comprising 219 cases from Singapore and Penang, and of dragon's-blood 20 cases have arrived in three consignments. Other imports include 24 cases eucalyptus oil from Melbourne, 80 cases potash bromide from Hamburg, 20 cases cassia oil, 140 barrels iodine from Antofagasta, 35 cases Mossel Bay aloes, and 6 bales buchu. There is little to repeat regarding heavy chemicals, as since last writing the tone of the market has been entirely of a holiday character, and consequently nothing of importance has been done. There has, of course, been a certain demand, and all things considered it has been of a satisfactory character. Sulphate of ammonia, after declining for an appreciable period, has advanced all round, and supplies have been taken up well. The advancing tone has also brought more inquiries forward, and especially so from abroad. Present nearest values: Beckton, 11l. 12s. 6d. to 11l. 15s.; Beckton terms, 11l. 2s. 6d. to 11l. 5s.; London, 11l. 2s. 6d. to 11l. 5s.; Leith, 11l. 6s. 3d. to 11l. 7s. 6d.; and Hull, 11l. 5s. to 11l. 7s. 6d. Makers are for the most part at present refusing to quote for deferred delivery.

Cablegrams.

SMYRNA, December 29:—The sales of opium on American account amount to 100 cases old selected Karahissar at the equivalent of 13s. 10d. per lb., indicating a hardening tendency, and higher prices are anticipated.

NEW YORK, December 31:—Business in drugs is moderate. Opium is unchanged and steady at last week's advance to \$4.35 per lb. Cascara sagrada is dull at 8½c. per lb. Central and South American copaiba is firm at 45c. Hydrastis (golden seal) is nominal at \$1.80 per lb. Peppermint oil is firm at \$1.45. Potassium bromide is unchanged. All Messina essential-oil quotations have been withdrawn.

American Drug-market.

New York, December 22.

Business in the New York drug-market is of satisfactory volume for this time of year, and a steady tone characterises the various departments. Prices, generally, are well maintained, and improved values are expected to mark the turn

of the year. Bromides and opium are higher. Peppermint oil and copaiba are firm.

ALOES.—Curaçao in cases has been in good demand, and, following the disposal of recent importations, prices hardened somewhat, the 7c. quotation being raised in most quarters to 7½c. Other varieties are following a routine course.

BROMIDES.—The belated advance in sympathy with foreign markets has taken place, the new prices being: Potassium, granular, 19c.; crystal, 21c.; ammonium, 27c.; sodium, 25c. Only small quantities are available at the above prices, and dealers decline to enter into contracts. The opinion prevailing here is that the unsettled condition of the markets is due to the lack of final agreement between the American and European interests, and that when negotiations are completed prices will be fixed on a higher basis.

CASCARA SAGRADA has been the subject of little interest on the part of consumers, most of whom hold sufficient to meet requirements for some time. The 8½c. quotation is nominal.

COPAIBA.—All grades of C. and S. American continue in good demand, and 45c. is now an inside price for U.S.P. Fair supplies of Para are on hand, and 50c. can be done in some quarters.

HYDRASTIS is not very active, and the prevailing quotations of \$1.80 to \$1.90 might be shaded. The drug is not at all plentiful, but consumption in this country has fallen off considerably in recent years.

PEPPERMINT OIL has received increased attention on the part of both domestic and foreign buyers, and the position is very firm, with the inside price for tins advanced to \$1.45.

Optical Observations.

By A Chemist-Optician.

Colour-vision.

Dr. F. W. Edridge-Green gave a paper before the British Medical Association in which he discussed colour-vision and its anomalies. The tests which Dr. Edridge-Green uses are (1) lantern-test, (2) classification-test, and (3) spectrum-tests. Thoroughly to understand colour-blindness he held that all three tests should be employed.

Lantern-test.—The lantern-test is, however, sufficient for practical purposes. A lantern-test has great practical advantages. If the persons to be tested have to distinguish between red, green, and white lights, by using these colours as the basis of a test we can at once ascertain whether they be efficient. The test with coloured lights is absolutely final; the man who will mistake red, green, and white in the consulting-room will make the same mistakes at sea.

Dr. Edridge-Green has brought out a new form of lantern, the chief improvements in which are that the glasses are mounted on slides; one slide contains the modifying glasses—namely, ground, ribbed, and four neutral glasses. The other three slides are identical in character, and each contains the two standard red, yellow, pure green, standard green, blue, and purple glasses. By this means a mixture of any two or three colours can be obtained with great rapidity. An iris diaphragm for diminishing the size of the light has also been added. One mistake in naming red, green, or white (yellow) should suffice for rejection.

Classification-test.—This test consists of four test-colours and 180 confusion-colours; 150 coloured wools, ten skeins of silk, ten squares of coloured cardboard, and ten squares of coloured glass. The test-colours are orange, violet, red, and blue-green. The candidate is asked to name the test-colours and is then told to select all those which are similar in colour to the test-colour. He is told to pay no attention to shade. He must not be allowed to watch a normal-sighted person go through the test. This differs in almost every detail from previous methods of testing. A series of colours has been chosen which presents especial difficulty to the colour-blind. In most of the tests in general use some of the most important colours are omitted—for instance, orange, black, and white. Putting red with black, white with green, and orange with red, green, and yellow are very common errors. The colours in Dr. Edridge-Green's classification-test have been combined in a pocket-test; small pieces of each of the colours being threaded on canvas, and the total series of colours placed irregularly on six slips. This method prevents direct comparison. The candidate is first asked to pick out the slips with colours similar to the test-colours on them and then to point out the colours on the slip. This method readily detects central scotoma as well as ordinary colour-blindness.

Spectrum-test.—This is the most accurate of all, and gives an immediate key to the colour-perception of the individual, no matter what his colour-perception may be. The examinee is asked to describe the spectrum, some portion of the middle being first shown. Then the ends are noted to see whether there be shortening, and finally the examinee is asked to mark out a few bands which appear to him monochromatic at different parts of the spectrum. This method is so accurate that, no matter how much experience a man may have had with colours or the spectrum, it is quite impossible for him to pass himself off as having better colour-perception than he has.

The defects of matching tests and the necessity of using the names of colours were mentioned. Any test ought to have the six main colours of the normal-sighted—red, orange, yellow, green, blue, and violet; purple, white, and black should also be included. Methods which use twin colours are useless, because a match to one colour blind is not a match to another. Tests in which the complementary colour has a part have little value because simultaneous contrast is increased, not diminished, in the colour-blind. Quantitative tests which assume that colour-blindness is a condition of chronic myopia are useless, as, though they show that a person with shortening of the red end of the spectrum cannot see red at a distance, a person with an unshortened spectrum can see colours at as great a distance as the normal-sighted.

New Test-types.

Mr. J. S. C. Elkington, Chief Health Officer of the Education Department of Tasmania, recently communicated to "The Lancet," an improved method of testing distant visual acuity. The method and the reasons which led up to the adaptation are thus given:

The medical inspectors have been struck in the examination of a large number of school children by certain defects in the Snellen's test types in ordinary use. These may be thus stated:

1. It often happens that a child, although seeing a letter or row of letters imperfectly, is able to give the letter or letters their proper designation—that is, the test is not a purely visual one, but partly a mental deductive process.
2. There is a marked tendency for the children to guess the letters.
3. By the phonic method of teaching the children to read many have difficulty in naming the letters, although they may see perfectly.
4. A number of children presented for examination are quite illiterate.
5. As it is almost impossible to have each child in a room alone while testing vision, the others may learn the test-type by rote.
6. It is possible to arouse the interest of the younger children and to stimulate vision effort by turning the test into a "game."

For these reasons Dr. Gertrude Halley and Dr. G. H. Hogg have introduced a new test-type for the use of the medical branch of the Tasmanian Education Department, and claim that the type will give more reliable results in the examination of visual acuity. This test-type has been adapted from Landolt's optotype figure of a black ring on a white ground, each ring having a break with parallel edges. Landolt uses only one sign for each degree. In the new type several signs have been introduced for each degree, as this reduces the chance of guessing to a minimum, consequently the type presents a series of rings, the breaks being placed in varying positions in each ring. Landolt represents the visual acuity in decimal form in fifteen degrees: 0.1, 0.15, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1, 1.25, 1.5, 1.75, and 2. Dr. Halley and Dr. Hogg have preferred to use the Snellen's system of representation.

In the new test-types when placed at the marked distance the spaces between the edges of the break correspond to an angle of one minute. Thus at a distance of 60 metres the break in the top figure corresponds to this angle, similarly in the second line at 36 metres, and so on, the well-known fraction $V = \frac{d}{D}$ giving the measure of visual acuity. The degrees are 6/60, 6/36, 6/24, 6/18, 6/12, 6/9, 6/6. The purity of the whites and blacks of the card is essential, and it is hoped to have the types printed on porcelain at a later date.

The Honduras Government has granted to General G. J. Herrera a ten years' concession, dating from June 18, 1909, for the extraction of chicle gum. The Government engages not to levy any dues on the gum exported during the term of the concession, but the concessionaire will be required to pay a tax of 6 cents (silver) per kilo. of gum to the Treasury.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. Publication of letters does not imply our agreement with the arguments or approval of the statements therein. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects presumably of interest to our readers generally. Letters received after the early posts on Wednesday cannot as a rule be dealt with in the current week's issue.

BUSINESS INFORMATION.—We have very full records of the makers or agents for articles and products connected with the chemical and drug trades, and supply information respecting them by post to inquirers. Inquiries regarding any articles which cannot be traced in this manner are inserted under "Information Wanted."

What about Drug-stores?

SIR,—They are not touched by the new Act. We have given companies a status; the best of them always did conduct their business properly, so they were entitled to it, and they have got it. We rightly prevent the unqualified in future forming a company and using the title "chemist." But poisons are only 1 to 5 per cent. of our sales; there is no dispensing for nine-tenths of us. Any porter who can rake up 20% can open a drug-store, and if he has seven or eight years' experience and knows the locality he can, and does, sell 95 to 99 per cent. of what any chemist sells (see *C. & D. Diary*, John Atfield on sham chemists, November 29, 1909). Centralisation of business into shopping localities makes it difficult for a chemist to live in many suburbs and working-class districts; makes it absolutely impossible for chemists' branch shops to pay 2l. 10s. a week wages for a qualified man to take 8l. or 10l. a week; makes it laughable to ask them to do so on account of the 2s. to 3s. weekly total of poison-sales.

Public convenience will override any Act which compels people to walk one or two miles to fetch a pennyworth of the four common poisons in daily use—red precipitate, oxalic acid, laudanum, and paregoric.

Mr. Herbert Samuel confessed in the House of Commons that public convenience has brought into existence the licensed vendors of agricultural and horticultural poisons, because, as he said, "the law was a dead letter, and could not be enforced." Hence the evasion of the law had to be legalised under certain specified conditions.

May I indicate a way out? The Society have now power to divide the examination. When a man passes a part, he will naturally get a certificate to say so. Therefore, to give some inducement, make that certificate a licence to sell, but not dispense, poisons, and I believe 50 per cent. of the drug-store owners would pass within two years. Many of them have passed more than half of it, and are still reckoned unqualified. Part of them would then be with us, and would be interested in urging the other part to go and do likewise, or would help us in preventing evasions of the law with regard to poisons. But we run the risk of Bradford all over again unless we have, at the age of eighteen (after serving three-years' apprenticeship), a licensed assistant, who would enable us to conduct our businesses legally by giving us legal time for meals and recreation, which 75 per cent. of the trade do not get at present. Vexatious prosecutions, as at Aberdeen, would drop. They are ridiculous anyhow, because to comply strictly with the law means that to have a qualified man the owner would sink his total profit.

The modified examination to be the first part of the Minor, and to entitle (1) eighteen-year-old apprentices (2) Army, Navy, hospital, and doctors' dispensers, (3) apothecaries' assistants, (4) drug-store owners, (5) assistants and men in business in 1908 who passed that examination to be licensed (a) as assistant to sell, but not dispense, poisons; (b) to take charge in the temporary absence of the owner; (c) to keep open drug-stores for the sale of certain poisons under certain specified conditions. If they

wish to become chemists or pharmacists they could do so by going on to the final part of the Minor examination. Even then the number of chemist-companies and drug-stores would be less in proportion to the population than in the U.S.A. Our own Preliminary examination should be reinstated or abolished entirely. Surely the standard of education in schools has risen sufficiently high for us to take a certificate from the headmaster of a day or night school to the effect that "W. S. Jones has been at school until age fifteen or sixteen, has studied certain subjects, and attained a class proficiency of 75 per cent., and has had Latin as a special."

Latin is the bugbear of every pharmacy-school class. I can well remember the poor show we all made, although we had in our time been painfully prepared in about three books of "Cæsar" in order to enable us to babble the dog-Latin names on bottles and drawers (which any errand-boy can get up in a year). Recipes by Charles Senate (of Blackpool Sands) and by newspapers are so legible nowadays that it is very funny to hear the nonsense talked about lowering the standard, when, as a fact, too high a standard of education brought us drug-stores, just as too high prices brought in companies to exploit the trade (*Diary*, 1909, June 28 and July 15). Time is up for twaddle to cease, and if historic firms want long-haired professors as assistants let them select the few who never will be missed by the rest of us. "Likely boys should do better than the drug-trade," said a Scotch schoolmaster to Mr. J. P. Gilmour.

Degrees in pharmacy and science and all the rest of it are obtainable for those ultra-scientific men who wish to follow up the practice of high-class pharmacy; but why, as the *C. & D.* said long ago, "try to force a standard upon all which is really only applicable to a few"?

For nine-tenths of us the future is a drug-store trade with side-lines of every conceivable sort, such as horse and cattle medicines and sheep-dips; hound-meal, dog-foods, and bird-seeds; bird-cages and a hospital for sick dogs, cats, and canaries; a mortuary for poisoned dogs and cats; garden seeds, manures, fertilisers, and insecticides. That is the class of trade most of us have to deal with for the next twenty-five years. Surely we have had enough of fallacies during the last twenty-five years to make us look the facts in the face. Bacteriology and all the other "ologies" together will not provide 10 per cent. of us with 10*l.* a year each for twenty years to come, and any chemist who knows the average working man, especially in the crowded colliery districts of the North, the Midlands, and South Wales, will agree with me: we are all ready to supply serums, etc., but the public do not want such things.

"The land is honeycombed by unqualified practice," says Mr. R. L. Gifford (*C. & D. Diary*, 1909, April 2), and the very fact that it exists and thrives and grows bigger is surely proof that the public want it and pay for it. It cannot be denied that we have created it; and just think of the anomaly that hundreds of drug-store men have probably passed in more of the Minor subjects than will be included in the first part of the new Minor, and you will see how unfair it would be not to make some special provision for them in the new Minor examination. President Young has done much to modernise the craft. Let us hope that before his year of office expires he will thoroughly set our house in order, for if the drug-stores are left out of his calculations, then it will be Bradford all over again. I have great hopes of President Young. He comes from Lancashire way. JAY MACK.

A Poison-schedule Card.

SIR,—We beg to enclose a copy of the card concerning the new Poisons and Pharmacy Act which we have just published, and a rough proof of which you have already received and commented on. While thanking you for your kindly note, we would point out that our object is to put before chemists and druggists as concisely as possible, and in a form which will always be available for ready reference, their privileges and responsibilities under the new Act. We are not concerned to instruct their competitors as to their position, and have therefore purposely omitted all reference to the conditions under which agricultural and horticultural poisons can be sold by others than qualified chemists, and also to the conditions under which corporate

bodies can practise pharmacy. We agree that coca is not in the Poisons Schedule, but seeing that it is richer in alkaloids than is the liquid extract, which is in Part II., and indeed may sometimes contain as much alkaloid as would bring a preparation within Part I., it would seem to be a wise policy for pharmacists to carry out the spirit of the Act in this connection rather than the letter.

Yours truly,

EVANS, GADD & Co., LTD.

(H. Wippell Gadd, Director)

Exeter, December 28.

[The card now received is printed with red-ink headlines. We note that our suggestions for improving it are treated controversially. Surely it is in the highest degree ridiculous to expect chemists to sell coca-leaves under Part I. conditions, especially as the Act does not treat the drug as a poison, its "preparations and admixtures" alone being scheduled.—EDITOR *C. & D.*]

Appreciations.

I think the *C. & D. Diary* a great improvement on former editions, and it comes in very useful, having the "Poison" Register in it.—A. D. C. (155/63.)

No subscription is more willingly paid, and no investment yields a better return, than my annual \$2.50 to the *C. & D.*—H. M. (Philadelphia, U.S.A.) (89/3.)

It is really a wonder to me how you can afford to give such a nice and highly useful *Diary* for so small a subscription! The more I look into your *Diary*, the more I appreciate it, and think that I cannot do without it.—J. P. AND N. P. MAGISTRATE (Bombay). (156/73.)

An *Australian Pharmacist* (150/66), writing by the last mail, says: "On making my start on my own account some five months ago, I availed myself of some of the advice given in your valuable journal, with results particularly satisfactory. I may say that to me your journal appears very much like a good old father, who has the interests of his children very much at heart, we chemists being the children."

Chemists' Friendly Society.

SIR,—As a qualified chemist of nearly forty years' experience I am desirous of pointing out to the trade generally that there is no association yet formed by them which is framed on the same lines as the Friendly and Provident Societies, in which life insurance, sick pay in case of illness, and other benefits too numerous to mention, are obtained by the members. I should like to hear of a chemist and druggists' association being formed for similar objects, and read opinions from other correspondents in your paper.

Yours truly,

A. J. N. (42/6.)

Faded Certificates.

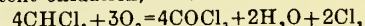
SIR,—Now that the certificate of the qualified manager is to be exhibited in the shop, could not the Society obtain some ink of a more permanent character with which to write his name on his hard-earned and proudly exhibited "ticket"? Mine, after nine years' exposure, can only be read by the eye of faith. Surely a Society whose examination syllabus and school prospectus contain the subjects of organic and inorganic chemistry, and who boast of a research laboratory, ought to be able to provide such a simple thing as black ink.

Yours truly,

MARTIN P. WALKER.

Deaths under Anæsthetics.

SIR,—Referring to your note under this heading (*C. & D.*, December 5, p. 864) your readers will agree that it is high time that stringent inquiries should be made into the cause of—and to consider what precautions may be taken to prevent—so many deaths resulting from the administration of anæsthetics. Is it not a fact that most of these deaths, if not all of them, are caused by the use of chloroform only? Chloroform, no matter how carefully it is kept, in ordinary bottles is liable to undergo to a certain extent oxidation, thus



—that is, when oxidised it is converted into phosgene and chlorine, the latter reacting with the alcohol present, forming HCl. Assuming this to be the case, I venture not only to state that it is this phosgene gas, COCl_2 ,

that is so dangerous to the patient, but will go as far as to say that if the necessary precautions were taken to prevent oxidation—that is, to ensure phosgene being entirely absent—the number of deaths which now occur would be minimised. Why not make it compulsory that all chloroform for anæsthetic purposes shall be used from hermetically sealed amber-glass containers, each holding such a quantity as would be sufficient for one administration?

Very faithfully yours,

S. E. A. (50/50.)

[Our correspondent is wrong: chloroform to which alcohol is added, as the B.P. requires, keeps indefinitely without decomposition. This has been repeatedly proved.—EDITOR C. & D.]

Seed Side-lines.

SIR,—Seeing that now it is permissible for horticulturists to stock and retail poisons, I see no reason why we should not push the sale of various seeds. I should be glad if you could give me any information on the subject. Is it better to buy in bulk and pack them as “nostrums” or to take up an agency for a reliable firm? If the former is what you consider the better, would you give me the address of a satisfactory house to deal with and the best steps to take to adopt this side-line?

Yours faithfully,

SEMINA. (153/12.)

[Our correspondent should read the article on this subject in the *C. & D. Diary*, 1890. Our own experience of the business is that it is profitable while it lasts, and that it can be worked up by men (suited for pushing agricultural and horticultural trade) to a really good thing. We shall be glad if a few who are doing the business will respond to “Semina’s” request.—EDITOR C. & D.]

Legal Queries.

Before submitting questions for reply in this section please refer to the “*C. & D. Diary*, 1909” for the following subjects: Income-tax, p. 220; Pharmacy Law and Poisons, p. 216, (abroad) p. 211; Spirit Laws, p. 229; Stamped Medicines, p. 221; Trade-marks, p. 194; Wines, Sale of, p. 231; and Legal matters generally, p. 233.

Smilax (146/54) had a customer for a proprietary pill, and informed him that he had only a broken box of the pills in stock, but would sell them for their value. The box was a 2s. 9d. one, bearing the stamp, which had been broken, and part of the contents sold in pennyworths. “*Smilax*” put the pills into an envelope (which he did not close) and handed them to the customer. Thereupon the customer asked for the empty box, which he obtained, put the pills into the box, closed it, and left the envelope on the counter. Was this a legal transaction on the part of “*Smilax*”? [We are not told whether or not the customer paid the money before he put the pills into the box, and that is probably material to the concession made by the Board of Inland Revenue. It is the duty of the seller of a dutiable medicine in an enclosure to see that the enclosure is properly stamped, and this duty probably requires that if the medicine is placed in an enclosure before the selling is complete, although not actually done by the seller, it should be stamped. This is, however, a technicality which need not worry “*Smilax*,” as the Board of Inland Revenue is not accustomed to proceed on technicalities of so adventitious a character.]

E. O. (156/26) has found the replies in regard to the Poisons and Pharmacy Act in our issue of December 26 so instructive that he puts a series of questions, as follows: (1) When a registered chemist carries on business at more than one shop, must the certificate of the proprietor be exhibited at the shop which he himself manages? [Yes.] Must the name of the proprietor be painted inside the shop as well as on the fascia outside? [Yes.] (2) In the case of a registered chemist owning more than one shop, if the proprietor only spends one or two hours a day at the shop, but employs a qualified assistant whom he relieves on the usual weekly half-holiday, must the certificate of the proprietor or that of the assistant be exhibited, or both? [There is some confusion here, but it is evident that a person who manages a shop alone on every day of the week except the half-holiday is the *bona-fide* conductor of the shop, and his name and certificate should be exhibited. If, as we suppose, the proprietor spends two or three hours per day in the principal shop he may legally say that he is the *bona-fide* conductor of the shop, and his name and certificate should be exhibited therein, but this will not cover the sale and dispensing of poisons by unqualified persons during his absence. It is not legally necessary to expose more than one name and certificate, though it may be done, but the object of the section

is to secure public intimation of who is the *bona-fide* manager, and a fine of 5*l.* is incurred if this is not done. A suitable exhibition would be such words as “John Smith, registered chemist and druggist, manager of this shop.”] (3) If a Minor man has lost his certificate, or if the certificate has become soiled, damaged, or mutilated, will the Society give another certificate several times over? Or will it be possible to obtain some sort of letter from the Registrar year by year certifying that the holder is duly qualified to deal in scheduled poisons. [The Society does not renew Minor certificates. It is obviously impossible for the Society to give a duplicate Minor certificate, seeing that in many cases the examiners who signed the original are dead or have ceased to act as examiners. There will not, we understand, be any difficulty in obtaining from the Registrar a certificate as provided for in Section 7 of the 1852 Act.] (4) Will it be an offence (punishable by law) to label nitric acid or sulphuric acid “Poison” instead of “Poisonous”? Many chemists have labelled these articles “Poison” for years past. Must salt of lemon be labelled “Salt of lemon,” or must it be labelled “Binoxalate of potassium,” or if the binoxalate is mixed with cream of tartar (for instance) how must it be labelled? [The word “poisonous” must be used. “Salt of lemon” is a sufficient name for binoxalate of potash or a mixture containing it. In interpreting Section 5 the 1868 precedent that the name of the article should be on the label will no doubt be followed, and salt of lemon is the household name in this instance.] (5) Will it be possible to stop the use of the word “pharmacy” on the fascias of shops belonging to unregistered persons and companies, or will a test-case have to be fought out on this point? [None of the Pharmacy Acts refers to descriptions of places but to titles of persons, so that this question does not arise from the new Act, which legalises the use of the title “pharmacist” by persons not at present able to use it, but says nothing at all about the description “pharmacy,” so that in this matter we stand exactly where we did.]

Maiden (89/24).—It is customary, when a lease is transferred in the sale of a business, for the outgoing and ingoing tenants to share the legal expenses between them. There is no law on the matter, except that the landlord does not pay.

Interested (155/32) puts the following questions, arising from Section 3 of the Poisons and Pharmacy Act, 1908: (1) Supposing a qualified chemist has a branch shop under unqualified management, no poisons being stocked in it, if the unqualified manager be asked for poisons could he send the order to the head shop for execution, to be delivered by the head shop and paid to the messenger from that shop? [Yes, this is in accordance with the decision in the Pharmaceutical Society *v.* White, but, as we have previously indicated, we are not prepared to say that a registered pharmaceutical chemist or chemist and druggist may after April 1 have a branch shop without a qualified chemist as manager. Certainly no registered chemist may carry on a branch shop bearing his name and title unless it is *bona fide* conducted by a qualified chemist, whether poisons are sold in it or not.] (2) If the qualified proprietor puts in four hours per day in the branch shop, may the unqualified manager reserve sales of poisons until then? [The clear intention of the Act and those who framed it and assisted in its amendment is that each shop in which the business of a chemist and druggist is carried on shall be conducted by a registered chemist who *bona fide* conducts that shop and no other chemist’s shop. Although Section 3 (1) does not specifically declare this fact, we consider that the wording means “one man, one shop,” and that the proposition of our correspondent could not be legally sustained in practice. Perhaps the question is an outlier to the proverbial coach and four.] (3) Can Blank, Ltd., make use of the word “pharmacist” by putting on the doorway or in any other prominent position “Manager X.Y.Z. Pharmacist,” although the manager is not financially interested in the company? [This question answers itself: if a company make use of the title “pharmacist” it is liable to the 5*l.* penalty. The manager may use the title in the manner directed by the Act—i.e., in the premises.]

Sac Faccis (157/7).—For the purposes of the Weights and Measures Acts a back shop is part of the trading premises, and scales placed there must conform to the statutory conditions and regulations. Counter beam-scales to weigh 2 lb. must be sensitive when fully loaded to 4½ grains, and 6 grains excess or deficiency is allowed when fully loaded.

Pharmacist (152/66).—A verbal agreement between an employer and his assistant is binding if not for more than twelve months, but see *C. & D. Diary*, p. 235, which should always be referred to before submitting legal questions.

Strode (152/61).—The balm is not a medicine, but a toilet-preparation which is not recommended for any human ailment, therefore it is outside the Medicine-stamp Acts.

Pcn (377/13).—The solicitor's charges for the lease as between landlord and tenant are payable by the tenant. This is a statutory obligation, and the fees are fixed by law. Those charged to you are reasonable, 5*l.* being the solicitor's remuneration for drawing up the agreement, and the rest for disbursements. The only way to avoid such charges is to come to an agreement with the lessor before instructions are given to the solicitors, and there appears to have been no agreement of the kind in your case.

A. C. (157/14).—As far as we can judge there is nothing in your circulars regarding the supply of artificial teeth which implies that you are a person specially qualified to practise dentistry, except the description "dental mechanic," which is so similar to "dental practitioner" (the title actually used in the Act) as likely to ensure your conviction in the event of prosecution, seeing that you perform dental operations as well as make or supply artificial teeth.

A. G. (157/18).—(1) If wholesalers or manufacturers of agricultural or horticultural poisons within the meaning of Section 2 of the Poisons and Pharmacy Act, 1908, sell to private persons, they will apparently require a licence under the section. Nothing is said in the Act about "supplying for free distribution," and a licence is only necessary when the poisons are sold or a shop is kept open for their sale. The present legal methods of wholesale dealing are not altered by the new Act. (2) You will observe that we commence to-day a series of expository articles on the Act. (3) Let us know specifically what articles you require, but first read the paper by Mr. F. Pilkington Sargeant in the *C. & D.*, December 5, p. 87*l.* (4) On and after April 1 no company (or firm in Scotland) can use the title "cash chemist" unless the superintendent has a seat on the board of directors of the company or is a partner in the firm. The word "pharmacy" is not in the same category, as it is a description of a place. Hitherto the Pharmaceutical Society have intimated to unregistered persons using that word that they have infringed Section 12 of the 1952 Act, but there is no legal decision to support that contention.

Anxious (157/13).—(1) Until the regulations under Section 2 of the Poisons and Pharmacy Act, 1908, have been drawn up by the Privy Council and placed before Parliament, there is no need to trouble yourself about a licence. Whether or not a licence will be granted to unqualified persons in a town of 5,000 inhabitants where there is already one chemist we cannot tell. (2) Sulphuric, nitric, and hydrochloric acids and all soluble oxalates may be sold on and after April 1 by unqualified persons, but the conditions as to labelling set forth in our issue of December 26, p. 969, must be carried out.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months. A preliminary condition for reporting on samples submitted is that all particulars as to source and uses are given to us.

J. L. & Co. (128/50).—**VETERINARY BOOK FOR FARMER'S USE.** Thompson's "Elementary Lectures on Veterinary Science," 6*s.* (Baillière, Tindall & Cox), is one which you can recommend for the use of a practical farmer.

Don (52/10).—**ASTHMA-SPRAY.**—The quantities given in the *C. & D.*, January 25, p. 112, are the proportions in each ounce of the spray. The basis may be saturated solution of boric acid or a mixture of equal parts of simple tincture of benzoic acid and glycerin.

A. H. (127/36).—**MOUTH-WASH.**—We gave eight formulæ for mouth-washes in the *C. & D.*, September 5, p. 404; one of these is probably of the kind you require, or at least offers suggestions towards that end.

Beeswax (123/37).—See *C. & D.*, September 5, p. 404, where a benzoic acid and thymol mouth-wash was given of the variety you desire.

J. T. D. (137/11).—**RACKET-VARNISH.**—See *C. & D.*, October 24, p. 669.

F. B. (124/63).—**DESTROYING ANTS IN BAKEHOUSE.**—Refer to *C. & D.*, October 19, 1907, p. 632, where the various methods are enumerated.

Sacc. Ust. (143/11).—The manufacture of caramel was last described in the *C. & D.*, December 22, 1906, p. 953, and the particulars are also given in "Pharmaceutical Formulas" (new edition, p. 882).

Extractor (137/25).—**BOOK ON TOOTH-EXTRACTION.**—Coleman's "Extraction of Teeth" (3*s.*, Lewis) is suitable for your requirements. This book was reviewed in the *C. & D.*, August 29, p. 360.

D. L. (149/43).—**BOOK ON DISEASES OF THE GENERATIVE ORGANS.**—Taylor's "Practical Treatise on Genito-Urinary and Venereal Diseases and Syphilis" (16*s.*, Kimpton).

W. R. B. (Baluchistan) (127/66).—(1) The **FEVER-POWDER** probably owes its virtues to the potassium chlorate it contains. Equal parts of potassium bicarbonate and potassium chlorate with a little powdered cochineal would resemble your sample. Weighed out into 15-grain doses, a powder could be taken night and morning. (2) Glykaline is a speciality of Messrs. Leath & Ross.

Ferrum (131/2).—The "compound coral powder" we suspect to be a proprietary powder for poultry diseases.

Quex (133/19).—**METAL-SCRUBBING POWDER.**—This is, we believe, a form of stannic oxide—putty-powder.

Photo (135/21).—We cannot undertake to identify powders which have lost their labels.

D. D. G. (Burma) (133/69).—(1) **SOAP-MAKING.**—We gave in the *C. & D.*, March 2, 1907, p. 350, full details of the manufacture of soap on the small scale by the cold process. It is too soon to repeat this in the *C. & D.*, but the Publisher can supply you with a copy of that number. (2) **CELLULOSE MANUFACTURE.**—Böckmann's "Celluloid, its Raw Material, Manufacture, Properties, and Uses" (5*s.*, Scott, Greenwood & Co.) gives the information on this subject which you desire.

Acetum (41/17).—We do not think medicinal means can be used to prevent the cat-trouble to which you refer. Prevention in this case is better than cure.

A. C. (155/37).—You will find a mixture of oils of citronella, cloves, and lavender most useful in covering the odour of wood naphtha in the methylated dry shampoo.

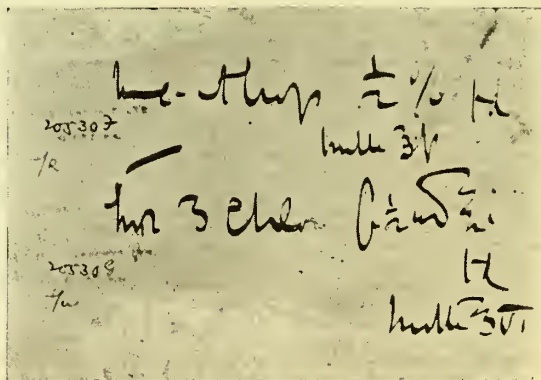
Rajah (130/17).—A **CORN** is an overgrowth of the superficial layer of the skin, due to pressure; a fibrous corn is a corn in which the fibrous layer (underlying the skin) is also overgrown. The treatment consists in removing the cause (pressure), getting rid of the superficial horny layer by painting with the ordinary salicylic collodion corn-paint, and then protecting from irritation. If there is so much fibrous tissue present as to form an unsightly or painful tumour, radical treatment by excision may be considered.

Prescription Problem.

THE facsimile given in the Supplement of November 28 brought an unusually poor response, although the prescription was well worth study. It read thus:

R Tan Ac
Pulv Alum
Zin Sulph aa ʒss.
Tr Lav Co. ʒij.
Aq ad ʒviiij.
ʒss c Oj of H₂O
ut dictu
ft inj

This time the prizes go to Mr. W. E. Peacock, c/o Cassie & Co., 49 Newgate Street, London, E.C., and Mr. J. Richards, 53 Knightsbridge, London, S.W.



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PRICES ISSUED WEEKLY.

Original Packages can generally be supplied at the Current Prices quoted in the Trade Report of this paper on Terms as below.

<p>Acetanilide, B.P., 1 cwt. @ 1/0½ lb.; 7 lbs. @ 1/2 lb.; 1 lb. @ 1/3 lb.</p> <p>*Acet. Ipecac. P.B., 7 lbs. @ 1/2 lb.</p> <p>*Scilla, P.B., 7 lbs. @ 3d. lb.</p> <p>*Acid. Acet. Glacial, 99%, 12 6-lb. bots. @ 6½d. lb.; 6 lbs. @ 8d. lb.</p> <p>Acid. Acetylo Salicyl., 56 lbs. @ 2/1 lb.; 7 lbs. @ 2/3 lb.; 1 lb. @ 2/5 lb.</p> <p>"Carbol. xtl., 39/40: 56 lbs. @ 6½d. lb.; 10 lb. Tins @ 6/6 each; 6 1-lb. Bots. @ 11d. lb.</p> <p>Ammon. Brom., P.B., 1 cwt. @ 1/1½ lb.; 7 lbs. @ 1/3 lb.</p> <p>Ammon. Carb. lump, 3 cwt. @ 3½d. lb.; 28 lbs. @ 4½d. lb.; 7 lbs. @ 5d. lb.; powder, 2d. lb. extra.</p> <p>Bals. Copaiba pure, 44 lbs. @ 2/3 lb.; 9 lbs. @ 2/5 lb.; 1 lb. @ 2/9 lb.</p> <p>Pals. Tolu. B.P., 50 lbs. @ 1/- lb.; 1 lb. @ 1/4 lb.</p> <p>Bismuth. P.B. Carb., 28 lbs. @ 7/7 lb.; 7 lbs. @ 7/10 lb.; 8 lbs. @ 8/1 lb.; subnit., 1/- lb. less.</p> <p>Benzo-naphthol, 7 lbs. @ 3/3 lb.; 1 lb. @ 3/10 lb.</p> <p>Caffeine, P.B., 1 lb. @ 1/3 lb.</p> <p>Caffeine Cit. B.P., 1 lb. @ 10/8 lb.</p> <p>Calcii Iodid., 1 lb. @ 1/4 lb.</p> <p>Camphor, Crude, 140 lbs. @ 1/4½ lb.; 28 lbs. @ 1/8 lb.</p> <p>Camphor, English Flowers, "not artificial," 5 lbs. @ 2/1 lb.; 1 oz. 7 lbs. @ 2/4 lb.; 1 oz. 7 lbs. @ 2/6 lb.; 1 cwt. lots, 1d. lb. less.</p> <p>Chloral Hydras Cryst. B.P., 7 lbs. @ 3/10 lb.; 1 lb. @ 4/2 lb.</p> <p>*Chlorodyne, 5 lbs. @ 1/10 lb.</p> <p>*Chloroform, pure B.P., 12 8-lbs. @ 1/7½ lb.; 8 lbs. @ 1/8½ lb.; 6 1-lb. bots. @ 1/10½ lb.</p>	<p>*Liq. Rhei p.s. 1-7, 6 lbs. @ 2/- lb.</p> <p>*Santal Co., 1 lb. @ 3/4 lb.</p> <p>*Senna Dulc., 6 lbs. @ 1/4 lb.</p> <p>*Senna pro Syr. 1-7, 6 lbs. @ 1/11 lb.</p> <p>Manna, fine flake, 14 lbs. @ 3/3 lb.</p> <p>Menthol, dry white cryst., 60 lbs. @ 7/1 lb.; 5 lbs. @ 7/6 lb.</p> <p>Morphine Acet. Hydrochlor. or Salph., Pulv., B.P., 16 oz. @ 7/1 oz.; 8 oz. @ 7/4 oz.; 1 oz. @ 7/8 oz.; Tart., 1 oz. @ 9/7 oz.</p> <p>Naphthaline Candles or Balls, 1 cwt. @ 12/- cwt.; 56 lbs. @ 14/- cwt.; 28 lbs. @ 15/6 cwt.</p> <p>Ol. Amygdal. Ang. B.P., 9 lbs. @ 1/9 lb.</p> <p>Ol. Amygdal. Essent. Artificial, free from Chlorine, 5 lbs. @ 3/6 lb.; 1 lb. @ 4/- lb.</p> <p>Ol. Anisi E.I., 66 lbs. @ 4/6 lb.; 16½ lbs. @ 4/10 lb.; 1 lb. @ 5/6 lb.</p> <p>Ol. Cajuput, B.P., Bots., 16 oz. @ 2/8 lb.</p> <p>Ol. Camphor. Essent., White, 80 lbs. @ 40/- cwt.; 40 lbs. @ 44/- cwt.; brown, 80 lbs. @ 35/- cwt.; 40 lbs. @ 90/- cwt.</p> <p>Ol. Caryoph. Ang. B.P., 9 lbs. @ 3/3 lb.; 4½ lbs. @ Cassia, 16½ lbs. @ 4/11 lb.; 6 lbs. @ 5/1 lb.</p> <p>Ol. Cinnam. B.P., 1 lb. @ 30/- lb.; 1 oz. @ 2/6 oz.</p> <p>Ol. Eucalypt., B.P., 1 cwt. @ 1/2 lb.; 28 lbs. @ 1/2½ lb.; 9 lbs. @ 1/3½ lb.</p> <p>Ol. Gerani Gall. Opt., 1 lb. @ 18/6 lb.; 8 1-oz. bots. @ 1/11 oz.; 1 oz. @ 2/1 oz.; Turc., 1 lb. @ 10/- lb.; 4 oz. @ 12/5 lb.</p> <p>Ol. Juniperi Bacc., B.P., 4½ lb. @ 3/6 lb.; 1 lb. @ 4/- lb.; Ligne Exot., 1 cwt. @ 1/2 lb.; 28 lb. @ 1/4 lb.; 9 lb. @ 1/5 lb.</p> <p>Ol. Lavand. ab Flor., 5 lbs. @ 8/6 lb.; 1 lb. @ 9/3 lb.</p> <p>Ol. Morrhua Nov. 1908, finest non-freezing Norwegian 25 gal. tin lined barrels; 1 barrel @ 64/- barrel; 2 gal. tins @ 3/6 per gal.</p>	<p>Potass. Iod. P.B., 1 cwt. @ 7/9 lb.; 14 lbs. @ 7/10 lb.; 3 lbs. @ 7/11 lb.</p> <p>Potass. Permang., Cryst., 1 cwt. @ 38/- cwt.</p> <p>7 lbs. @ 5d. lb.; large cryst., 7 lbs. @ 6d. lb.</p> <p>Pulv. Caryoph. 7 lbs. @ 10d. lb.</p> <p>Pulv. Glycyrrh. Oo. B.P. (Green), English Ground, 56 lbs. @ 31/- cwt. [9d. oz.; 10 oz. @ 10d. oz.</p> <p>Quinine Bisulph. 100 oz. @ 8d. oz.; 25 oz. @ Quinine Ethyl Carb. (Tasteless), 100 oz. @ 2/5 oz.; 10 oz. @ 2/9 oz.</p> <p>Quinine Hydrobromas or Hydrochlor. B.P., 100 oz. @ 11½d. oz.; 25 oz. @ 1/0½ oz.; 10 oz. @ 1/2 oz.</p> <p>Quinine Sulph., P.B., 1,200 oz. @ 6½d. oz.; 100 oz. @ 7d. oz.; 25 oz. @ 7½d. oz.; 10 oz. @ 8d. oz.</p> <p>Rad. Jalap., English ground, 28 lbs. @ 1/7 lb.; Rad. Rhei E. I., English ground, 1 cwt. @ 1/2½ lb.; 28 lbs. @ 1/4½ lb.; 7 lbs. @ 1/5 lb.</p> <p>Resin, pulv., 7 lbs. @ 3d. lb.</p> <p>Santonine, P.B., 1 lb. @ 1/6.</p> <p>Sapo Cast. Alb. pulv., 1 cwt. @ 58/6 cwt.; 56 lbs. @ 62/- cwt.; 7 lbs. @ 7½d. lb.; Animal pulv., 1 cwt. @ 50/6 cwt. 56 lbs. @ 6d. lb.; 7 lbs. @ 7d. lb.</p> <p>Shellac (Orange), 1½ cwt. @ 102/- owt.; 28 lbs. @ 1/- lb.; 7 lbs. @ 1/1 lb.</p> <p>Sodii Bromid. P.B., 1 cwt. @ 1½ lb.; 7 lbs. @ Soda Salicyl. pulv., 1 cwt. @ 1/5 lb.; 28 lbs. @ 1/6 lb.; 7 lbs. @ 1/7 lb.; phys. pur., 28 lbs. @ 2/2 lb.; 1 lb. @ 2/5 lb.</p> <p>"Sulphocarbolas B.P., 7 lbs. @ 10½d. lb.; *Sp. Ammon. Aromat. P.B., 5 lbs. @ 2/1 lb.; *Spt. Aether Nit. P.B., 4½ lbs. @ 2½d. lb.; 1 lb. @ 2/11 lb. bond, 6½d. lb.</p> <p>*Tinct. Camph. Comp. P.B., 5 lbs. @ 1/10 lb.;</p>
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NEW DETAILED PRICE LIST NOW READY FOR ISSUE

to Customers and New Applicants on Request.

N.B.—Parties having in the past had Lists and never ordering are asked—
NOT—to apply.

<p>Coccaline Hydrochlor. P.B., 25 ozs. @ 7/4 oz.; 4 ozs. @ 7/8 oz.; 1 oz. @ 8/- oz.</p> <p>Oodeina, 1 oz. @ 11/6 oz.; Phosph., 1 oz. @ 10/- oz.; Hydrochlor. or Sulph. 1 oz. @ 10/8 oz.</p> <p>Ext. Cascara Sagrada, Liq. B.P., 10 lbs. @ 1/1 lb.</p> <p>Gran. Parad., 7 lbs. @ 7d. lb.; Powder, 7 lbs. @ 8d. lb.</p> <p>*Inf. Aurant. Conc., 1 to 7, 6 lbs. @ 1/- lb.</p> <p>*Inf. Aurant. Comp. Oono., 1 to 7, 6 lbs. @ 1/2 lb.</p> <p>Licorice Juice, 4 and 2 oz. Sticks, 5 cwt. @ 57/- cwt.; 1 cwt. @ 53/- cwt.; 28 lbs. @ 7d. lb.; 7 lbs. @ 7½d. lb.</p> <p>*Liu. Aconiti Meth., 5 lbs. @ 1/3 lb.; 1 lb. @ 1/6</p> <p>*Lin. Bellad. Meth., 5 lbs. @ 1/5 lb.; 1 lb. @ 1/8 lb.</p> <p>Lin. Camph. P.B., 40 lbs. @ 11d. lb.; 9 lbs. @ 11d. lb.</p> <p>Lin. Sapo Meth., 9 lbs. @ 7d. lb.</p> <p>Lin. Tereb. Acet., B.P., 9 lbs. @ 1/- lb.</p> <p>Linseed c. Oil, Crushed, 3 cwt. @ 16/- cwt.; 1 cwt. @ 16/6 cwt.</p> <p>*Liq. Ammonii Acetatis Conc. 1-7, 6 lbs. @ 10½d. lb.; 1 lb. @ 1/0½ lb.</p> <p>*Ammon. Aromat., 6 lbs. @ 8d. lb.</p> <p>*Arsenicalis, B.P., 7 lbs. @ 4d. lb.; 1 lb. @ 7d. lb.</p> <p>*Arsenii Hydrochlor., P.B., 7 lbs. @ 4d. lb.; Bismuth. P.B., 6 lbs. @ 10½d. lb.</p> <p>*Easton., p.s. 1-3, B.P., 1 lb. @ 3/- lb.</p> <p>*Ferri Iod. p.s. 1-7, 1 lb. @ 5/9 lb.</p> <p>*Iodi Fort. B.P., 5 lbs. @ 3/9 lb.</p> <p>*Morphine Acet. or Hydrochlor. P.B., 6 lbs. @ 2/4 lb.</p> <p>*Liq. Opii Sed., 5 lbs. @ 3/- lb.</p> <p>*Pruni Virg. p.s. 1-7, 5 lbs. @ 2/- lb.</p> <p>*Rheados pro syr., 1 to 7, 5 lbs. @ 1/9 lb.</p>	<p>Ol. Nucis, 2 gall. tins @ 4/6 gall.</p> <p>Ol. Oliva, P.B., good yellow, 46 galls. @ 4/9 gall. 2 galls. @ 5/5 gall.</p> <p>Ol. Peach Kernel (so-called) 1 cwt. @ 10d. lb.; 56 lbs. @ 10½d. lb.; 9 lb. @ 1/- lb.</p> <p>Ol. Ricini Alb. Opt. Medicinal, 176 lb. @ 33/6 cwt.; 88 lb. @ 35/6 cwt.; 44 lb. @ 38/- cwt.; 9 lbs. @ 5½d. lb.</p> <p>Ol. Santali Flav. Ang. B.P., 5 lbs. @ 10/9 lb.; 1 lb. @ 11/3 lb.</p> <p>"Sinapis Express., 1 gall. tins @ 4/6 each.</p> <p>"Theobromae B.P., 8-oz. tabs, 28 lbs. @ 1/5 lb.; 7 lbs. @ 1/6½ lb.</p> <p>"Wintergreen Artificial, 56 lbs. @ 1/4 lb.; 5 lbs. @ 1/8 lb.; 1 lb. @ 1/10 lb.</p> <p>Opium Turc. B.P., 3 lbs. @ 14/6 lb.; 1 lb. @ 15/- lb.; powder, 6d. lb. extra.</p> <p>Otto Rose, finest, 1 oz. @ 20/6 oz.; No. 2, 1 oz. @ 15/6 oz.</p> <p>Oxymel Scilla, B.P. 5 cwt. @ 27/- cwt.; 1 cwt. @ 30/- cwt.; * 7 lbs. @ 6d. lb.</p> <p>Paraffinum Durum B.P. 2 cwt. @ 3½d. lb.; 1 cwt. @ 4d. lb.; 56 lbs. @ 4½d. lb.; 7 lbs. @ 5d. lb.</p> <p>Molle Flav. B.P., 3½ cwt. @ 16/6 cwt.; 28 lbs. @ 3½d. lb.; Alb. B.P. 3½ cwt. @ 55/- cwt.; 28 lbs. @ 7d. lb.</p> <p>Paraldehyde, B.P., 7 lbs. @ 1/10 lb.; 1 lb. @ Pepsin, P.B., 10 lbs. @ 9/- lb.; 1 lb. @ 9/6 lb.</p> <p>Phenacetin, P.B., pulv. 1 cwt. @ 2/8 lb.; 7 lbs. @ 2/10 lb.; 1 lb. at 3/- lb.</p> <p>Phenazone, P.B., 7 lbs. @ 7/- lb.; 1 lb. @ 7/6 lb.</p> <p>Phenolphthalein, 7 lbs. @ 9/3; 1 lb. @ 10/- lb.</p> <p>Plumbi Acetas, Druggists', 1 cwt. @ 35/8 cwt.; 7 lbs. @ 4½d. lb.; powder, 1d. lb. extra.</p> <p>Potass. Brom., P.B., 1 cwt. @ 11d. lb.; 28 lbs. @ 11½d. lb.; 7 lbs. @ 1/- lb.</p>	<p>*Tinct. Oantharidis, P.B., 5 lbs. @ 3/- lb.; bond, 6d. lb.</p> <p>*Tinct. Oapsici B.P., 5 lbs. @ 2/8 lb.</p> <p>*Tinct. Oaril. Oomp. P.B., 5 lbs. @ 1/11 lb.; bond, 6d. lb.</p> <p>*Tinct. Catechu P.B., 5 lbs. @ 2/1 lb.; bond, 7½d. lb.</p> <p>*Tinct. Chlorof. c. Morph. Oomp. B.P. 1885, 5 lbs. @ 1/10 lb.; bond, 1/5½ lb.</p> <p>*Tinct. Cinchon. Comp. B.P., 5 lbs. @ 2/9 lb. bond, 10½d. lb.</p> <p>*Tinct. Cinchon. Rub. P.B., 5 lbs. @ 2/6 lb.; bond, 10d. lb.</p> <p>*Tinct. Digitalis B.P., 5 lbs. @ 2/1 lb.; bond, 5½d. lb.</p> <p>*Tinct. Gelsem. B.P., 5 lbs. @ 2/3 lb.</p> <p>*Tinct. Gentiana Oomp. P.B., 5 lbs. @ 1/7 lb.; bond, 6d. lb.</p> <p>*Tinct. Hyoscyami, B.P., 5 lbs. @ 2/6 lb.; bond, 6d. lb.</p> <p>*Tinct. Iodi B.P., 5 lbs. @ 3/2 lb.; bond, 1/1½ lb.; decolor, 5 lbs. @ 3/8 lb.</p> <p>*Tinct. Lavandula Comp. B.P., 5 lbs. @ 3/- lb.; bond, 6½d. lb.</p> <p>*Tinct. Myrrhae B.P., 5 lbs. @ 3/- lb.; bond, 9d. lb.</p> <p>*Tinct. Nucis Vom. B.P., 5 lbs. @ 2/3 lb.; bond, 5½d. lb.</p> <p>*Tinct. Opii B.P., 5 lbs. @ 2/7 lb.; bond, 1,11 lb.</p> <p>"Opium Amon. B.P., 5 lbs. @ 3/8 lb.</p> <p>"Opium Aquos, 5 lbs. @ 2/1 lb.</p> <p>"Quinae Amon. B.P., 5 lbs. @ 2/2 lb. bond, 11d. lb.</p> <p>*Tinct. Rhei Co. B.P., 5 lbs. @ 1/9 lb.; bond 8d. lb.</p>
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*Minimum quantity at these prices, Home Trade, 3 Winchester Quarts assorted. Export, 12 Winchester Quarts assorted

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Is not only an infallible remedy against sea-sickness, train-

sickness, &c., but stimulates the appetite and enables the worst traveller to enjoy a voyage.

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**J.D. Quinine and Cinnamon Oil Perles
RELIABLE AND EFFECTIVE.**

PUT UP IN Fancy Decorated Tins to retail at 1/- each,

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THE Chemist's Co-operative Wholesale.

Acetanilide, B.P. 7 lbs. @ 1/2 lb.; 1 lb. @ 1/3 lb.
Acetum Ipecac. B.P. 7 lbs. @ 1/- lb.
Acetum Scillae B.P. 7 lbs. @ 3d. lb.
Acid. Acetic, Glacial, B.P. 6 lbs. @ 7d. lb.
Acetyl-salicylic, B.P. 7 lbs. @ 2/2 lb.; 1 lb. @ 2/4 lb.
Benzoin, B.P. 7 lbs. @ 1/8 lb.; 1 lb. @ 1/10 lb.
Carbolic, Cryst. B.P. 1 cwt. @ 6d. lb.; 10 lbs. @ 7d.; 112 1-lb. bots. @ 9d.; 6 1-lb. bots. @ 10d. lb.
Hydrobrom. Dil. B.P. 6 lbs. @ 7d. lb.
Oxalic, Cryst. 5 cwt. @ 3d. lb.; 1 cwt. @ 3d. lb.; 14 lbs. @ 4d. lb.
Adeps Benz. B.P. 28 lbs. @ 7d. lb.
Aloes Barb. Pulv. 1 cwt. @ 60/- cwt.; 7 lbs. @ 9d. lb.
Aloin B.P. 1 lb. @ 3/9 lb.
Ammon. Bromid. B.P. 7 lbs. @ 1/1 lb.
Amyli Pulv. 2 1/2 cwt. @ 13/9 cwt.; 1 cwt. @ 15/-; 28 lbs. @ 16/- cwt.
Aniseed, English Ground. 1 cwt. @ 33/- cwt.; 28 lbs. @ 35/- cwt.
Antim. Nig. Pulv. 1 cwt. @ 27/- cwt.; 28 lbs. @ 29/- cwt.
Aqua Anethi Conc., 1 to 40. 5 lbs. @ 1/10 lb.; Bond 1/- lb.
Carul Conc., 1 to 40. 5 lbs. @ 1/9 lb.; Bond 11d. lb.
Menth. Pip. Conc., 1 to 40. 5 lbs. @ 1/10 lb.; Bond 11d. lb.
Balsam Copaiba Pure, B.P. 9 lbs. @ 2/3 lb.; Bond 2/6 lb.
Tolu, B.P. 40 lbs. @ 1/- lb.; 1 lb. @ 1/4 lb.
Bandages, W.O.W. 1 in. 6s. 6d.; 1 1/2 in. 8s. 3d.; 2 in. 10/6; 2 1/2 in. 13/-; 3 in. 16/- per gross.
Bismuth Carb. B.P. 3 lbs. @ 7/6 lb.; 1 lb. @ 7/8 lb.
Subnit. B.P. 3 lbs. @ 6/6 lb.; 1 lb. @ 6/8.
Bottles, Dispensing. 2 oz. 5s. 9d.; 3 and 4 oz. 6s. 3d.; 6 and 8 oz. 7s. 3d.; 10 oz. 9/6; 12 oz. 10/6; 16 oz. 14/- per gross. Carriage paid terms on application.
Calcii Carb. Precip. No. 1. Lightest, 5 cwt. @ 13/- cwt.; 56 lbs. @ 16/6
Camphor, English Flowers. genuine, 5 lbs. @ 2/0 1/2 lb.
Tab. English, 1/2, 3/4, and 1/2 oz., 7 lbs. @ 2/3 1/2 lb.
Japanese, 1 oz., 7 lbs. @ 1/9 lb.
Cera Alb. B.P., Moons, 1 cwt. @ 1/5 1/2 lb.; 28 lbs. @ 1/6 lb.; 4 lbs. @ 1/7 lb.
Flav. B.P., Bright, 1 cwt. @ 1/4 lb.; 28 lbs. @ 1/4 1/2 lb.; 4 lbs. @ 1/6 lb.
Chloroform, B.P. 3 x 1 lb. Bots. @ 1/10 1/2 lb.
Cocain. Hydrochlor. B.P. 25 ozs. @ 7/3 oz.; 4 ozs. @ 7/8; 1 oz. @ 8/-
Conf. Senna B.P. 14 lbs. @ 7d. lb.; 7 lbs. @ 7 1/2 d.
Cotton Wool, White Absorbent, Interleaved, 1 lb. rolls, 28 lbs. @ 6d.; 7 lbs. @ 7d. lb.
Creta c. Camph. B.P. 7 lbs. @ 7d. lb.
Dec. Aloes Co. Conc., 1 to 3. 6 lbs. @ 1/11 lb.; Bond 1/4 lb.
" " sine Croco, 6 lbs. @ 1/- lb.; Bond 9d. lb.
Cinchon. Conc., 1 to 7. 6 lbs. @ 1/2 lb.; Bond 11d. lb.
Sarsae Jam. Co. Conc., 1 to 7. 6 lbs. @ 2/- lb. Bond 1/4 lb.
Senegae Conc., 1 to 7. 6 lbs. @ 1/8 lb.; Bond 1/3 lb.
Douches. Boxed complete, with 6 ft. I.R. Tubing, 2 Pt. 16/9; 3 Pt. 18/-; 4 Pt. 19/6 doz.
Enemas, Black I.R., Guaranteed, 3 doz. @ 13/- doz.; 1 doz. @ 13/6.
Ext. Belladon. Liq. B.P. 5 lbs. @ 3/3 lb.; Bond 1/9 lb.
Cascar. Sagrad. Liq. B.P. 6 lbs. @ 1/1 lb.; Bond 10d. lb.
Ergot Liq. B.P. 5 lbs. @ 2/- lb.; Bond 1/6 lb.
Glycyrrh. Liq. B.P. 6 lbs. @ 1/- lb.; Bond 8d. lb.
Ipecac. Liq. B.P. 5 lbs. @ 8/9 lb.; Bond 6/9 lb.
Nucis Vom. Liq. B.P. 5 lbs. @ 2/6 lb.; Bond 1/5 lb.
Sarsae Liq. B.P. 5 lbs. @ 2/- lb.; Bond 1/6 lb.
Fennel, English Ground. 1 cwt. @ 37/- cwt.; 28 lbs. @ 39/- cwt.
Ferri et Ammon. Cit. B.P. 28 lbs. @ 1/4 1/2; 7 lbs. @ 1/5 1/2 d.; et Quinin. Cit. B.P. 100 oz. @ 3d. oz.; 25 oz. @ 3d.; 1,000 x 1-oz. bots. @ 4d.; 100 x 1-oz. bots. @ 4d.
Flor. Anthem. Good Medium. 7 lbs. @ 6d. lb.
Fol. Senna, Good Clean Leaf, 1 cwt. @ 3d. lb.; 28 lbs. @ 3d. lb.
Glycerine, B.P., 1,260. 1 cwt. @ 68/-; 56 lbs. @ 69/- cwt.
Glycerin. Acid. Carbolic. B.P. 6 lbs. @ 1/- lb.; 3 lbs. @ 1/11 lb.
" Tannic. B.P. 6 lbs. @ 1/1 lb.; 3 lbs. @ 1/2 lb.
Belladon. B.P.C. 6 lbs. @ 1/11 lb.; 3 lbs. @ 2/- lb.
Boracis B.P. 6 lbs. @ 11d. lb.; 3 lbs. @ 1/- lb.
Pepsini B.P. 6 lbs. @ 1/10 lb.; 1 lb. @ 2/- lb.
Honey, Pale Set. 14 lbs. @ 4d. lb.
Hydroquinone, 1 lb. @ 4/- lb.
Infus. Aurant. Co. Conc., 1 to 7. 6 lbs. @ 1/1 lb.; Bond 8d. lb.
Buchu Conc., 1 to 7. 6 lbs. @ 1/- lb.; Bond 8d. lb.
Calumbae Conc., 1 to 7. 6 lbs. @ 10d.; Bond 5d. lb.
Cinchon. Acid. Conc., 1 to 7. 6 lbs. @ 1/4 lb.; Bond 10d. lb.
Infus. Gent. Co. Conc., 1 to 7. 6 lbs. @ 10d. lb.; Bond 5d. lb.
Rose Acid. Conc., 1 to 7. 6 lbs. @ 1/3 lb.; Bond 11d. lb.
Senegae Conc., 1 to 7. 6 lbs. @ 1/9 lb.; Bond 1/6 lb.
Iodoform Pulv. B.P. 7 lbs. @ 12/- lb.; 3 lbs. @ 12/4 lb.; 1 lb. @ 12/6 lb.

Lin. Aconit. Meth. 5 lbs. @ 11d. lb.
" Belladon. Meth. 5 lbs. @ 1/2 lb.
" Camph. B.P. 40 lbs. @ 10d. lb.; 9 lbs. @ 11d.
" Saponis Meth. 5 lbs. @ 6d. lb.
Linseed c. Oil, Crushed. 1 cwt. @ 16/- cwt.
Lint. 7 lbs. @ 1/2 lb.
Liq. Bismuth. et Ammon. Cit. B.P. 6 lbs. @ 10d. lb.
" Copalib. Buchu et Cubeb. 5 lbs. @ 2/- lb.
" Ferri Iodid. p.s., 1 to 7. 1 lb. @ 5/6 lb.
" Ferri Perchlor. Fort. B.P. 9 lbs. @ 3d. lb.
" Morph. Hydrochlor. B.P. 6 lbs. @ 2/3 lb.; Bond 1/9 lb.
" Rhei, p.s., 1 to 7. 6 lbs. @ 1/10 lb.; Bond 1/- lb.
" Santal. Co. 6 lbs. @ 2/3 lb.; Bond 1/9 lb.
" Senna, p.s., 1 to 7. 6 lbs. @ 1/6 lb.; Bond 1/3 lb.
Liquorice Juice, Pure (3 1/2 oz. sticks). 1 cwt. @ 56/6 cwt.; 28 lbs. @ 6d. lb.; 7 lbs. @ 7d. lb.
Lithia Carbonate B.P. 28 lbs. @ 2/3 lb.
Magnes. Sulph. B.P. 1 cwt. @ 5/9 cwt.
Mist. Senna Co. B.P. 20 lbs. @ 5d. lb.; 6 lbs. @ 6d. lb.
Morphine Acet. Hydrochlor. or Sulph. Pulv. B.P. 16 oz. @ 7/1 oz.; 8 oz. @ 7/3 oz.; 1 oz. @ 7/6 oz.
Naphthalin, Candle, Marble, or Flake. 1 cwt. @ 11/- cwt.; 28 lbs. @ 13/- cwt.
Oleum Amygd. Dulc. Ang. B.P. 9 lbs. @ 1/8 lb.
" Amygd. Persic. 9 lbs. @ 11d. lb.
" Caryoph. B.P. Ang. 5 lbs. @ 3/4 lb.; 2 lbs. @ 3/5 lb.
" Eucalypti B.P. 9 lbs. @ 1/3 1/2 lb.; 4 1/2 lbs. @ 1/4 1/2 lb.
" Morrhu Nov. Opt. 1 barrel @ 60/-; 2 gallons @ 3/4 gallon.
" Ricini Alb. Opt. 160 lbs. @ 30/6 cwt.; 80 lbs. @ 31/6; 40 lbs. @ 32/6; 9 lbs. @ 5d. lb.
Oxymel Scillae. B.P. 28 lbs. @ 4d. lb.; 7 lbs. @ 4 1/2 d.
Phenacetin. B.P. Pulv. 7 lbs. @ 2/7 lb.; 1 lb. @ 2/9.
Phenazone B.P. 7 lbs. @ 6/10 lb.; 1 lb. @ 7/2 lb.
Potass. Bromid. B.P. 28 lbs. @ 11d. lb.; 7 lbs. @ 1/- lb.
Iodid. B.P. 14 lbs. @ 7/7 lb.; 3 lbs. @ 7/9
Pulv. Glycyrrh. Co. B.P. 28 lbs. @ 30/- cwt.
Quinin. Sulph. B.P. 100 ozs. @ 7d. oz.; 25 ozs. @ 7d.
Rad. Gentian., English Ground. 1 cwt. @ 31/6 cwt.; 28 lbs. @ 33/6 cwt.
Rad. Rhei, E.I., Pulv., Elect. 4 lbs. @ 2/3 lb.
Resorcin, 7 lbs. @ 3/3 lb.; 1 lb. @ 3/6 lb.
Sapo Castil. Alb. Pulv. 1 cwt. @ 56/- cwt.; 7 lbs. @ 7d. lb.
Sodii Bromid. B.P. 7 lbs. @ 1/1 lb.
" Salicyl. Pulv. 28 lbs. @ 1/3 lb.; 7 lbs. @ 1/4 lb.; 1 lb. @ 1/6 lb. Cryst. B.P., 1/2 extra.
Syr. Easton B.P. 7 lbs. @ 9d. lb.
" Ferri Iodid. B.P. 7 lbs. @ 1/1 lb.
" Ferri Phosph. Co. B.P.C. 28 lbs. @ 3d. lb.; 7 lbs. @ 4d.
" Hypophosph. Co. B.P.C. 7 lbs. @ 7d. lb.
" Rhei B.P. 7 lbs. @ 6d. lb.
" Scillae B.P. 28 lbs. @ 3d. lb.; 7 lbs. @ 4d. lb.
" Senna B.P. 7 lbs. @ 7d. lb.
" Tolut. B.P. 7 lbs. @ 5d. lb.
Tinct. Aurant., Recens. B.P. 5 lbs. @ 2/5 lb.; Bond 8d. lb.
" Belladon. B.P. 5 lbs. @ 2/- lb.; Bond 6d. lb.
" Benzoin. Co. B.P. 5 lbs. @ 2/6 lb.; Bond 8d. lb.
" Calumbae B.P. 5 lbs. @ 1/11 lb.; Bond 6d. lb.
" Camph. Co. B.P. 5 lbs. @ 1/9 lb.; Bond 6d. lb.
" Canthar. B.P. 5 lbs. @ 2/11 lb.; Bond 6d. lb.
" Cardam. Co. B.P. 5 lbs. @ 1/10 lb.; Bond 6d. lb.
" Chlorof. c. Morph. B.P. 85. 5 lbs. @ 1/6 lb.; Bond 1/3 lb.
" Cinchonae B.P. 5 lbs. @ 2/6 lb.; Bond 10d. lb.
" " Co. B.P. 5 lbs. @ 2/7 lb.; Bond 10 1/2 d. lb.
" Digitalis B.P. 5 lbs. @ 1/11 lb.; Bond 5d. lb.
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" Gent. Co. B.P. 5 lbs. @ 1/6 lb.; Bond 6d. lb.
" Guaiaci Ammon., B.P. 5 lbs. @ 2/7 lb.; Bond 10d. lb.
" Lavand. Co. B.P. 5 lbs. @ 2/4 lb.; Bond 6d. lb.
" Nucis Vom. B.P. 5 lbs. @ 1/11 lb.; Bond 5d. lb.
" Opil B.P. 5 lbs. @ 2/6 lb.; Bond 1/8 lb.
" Opil Aquos. 5 lbs. @ 1/11 lb.; Bond 1/8 lb.
" Quinine Ammon. B.P. 5 lbs. @ 1/10 lb.; Bond 10 1/2 d. lb.
" Rhei Co. B.P. 5 lbs. @ 1/8 lb.; Bond 8d. lb.
" Zingib. B.P. 5 lbs. @ 2/9 lb.; Bond 6d. lb.
" Zingib. Fort. 5 lbs. @ 3/11 lb.; Bond 10 1/2 d. lb.
Ung. Acid. Boric. B.P. 28 lbs. @ 6d. lb.
" " Flav. 28 lbs. @ 4d. lb.
" " Carbolic. B.P. 28 lbs. @ 6d. lb.; 7 lbs. @ 7d. lb.
" Gallae, B.P. 7 lbs. @ 10d. lb.; c. Opio B.P. 7 lbs. @ 2/- lb.
" Hydrarg. Ammon. B.P. 28 lbs. @ 10d. lb.; 7 lbs. @ 11d. lb.
" Resine B.P. 28 lbs. @ 9d. lb.; 7 lbs. @ 10d. lb.
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Zinci Oxid. B.P. 1 cwt. @ 33/- cwt.; 14 lbs. @ 4d. lb.
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P.A.T.A. Protected Prices.

	Adver- tised Price.	Minimum Retail Price.	Minimum Whole- sale Price to Retailers.	Minimum Price to Wholesale Dealers.
"Linseed Compound"	9½d.	9½d.	8/1	8/6
	13½d.	1/-	10/-	10/6
	2/9	2/6	25/8	27/-
	4/6	4/-	40/-	42/-
	11/-	10/-	104/6	110/-
Kay's Tie Pills	9½d.	9½d.	8/1	8/6
	13½d.	1/-	10/-	10/6
	2/9	2/6	25/8	27/-
Mountain Flax ("Linum Catharticum") Pills	9½d.	9½d.	8/1	8/6
	13½d.	1/-	10/-	10/6
	2/9	2/6	25/8	27/-
Kay's Throat Lozenges	9½d.	9½d.	8/1	8/6
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discount, and
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Pil. Back and Kidney (Oval) Gelatine-coated (Ext. Buchu, Ext. Uvae Ursi, Pulv. Capsici, aa. gr. $\frac{1}{2}$; Ol. Juniper, M $\frac{1}{2}$; Pulv. Pot. Nit. gr. $\frac{1}{2}$; Podophyllin, gr. $\frac{1}{2}$; Tereb. Venet., gr. $\frac{1}{2}$) .. .	7d. per gross.	
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Pil. Calcii Sulphid., gr. $\frac{1}{2}$ & $\frac{1}{4}$, or 1 .. .	2½d. per gross.	
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Pil. Gout and Rheumatic (Ext. Colchicii Acct., gr. ss.; Pil. Hydrarg., Pil. Rhei Co., Ext. Hyoscy., aa. gr. i.) .. .	7d. per gross.	
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Pil. Quinine, gr. i. .. .	5½d. per gross.	
Pil. Quinine, gr. ij. .. .	9d. per gross.	
Pil. Rhei Co., B.P. .. .	2d. per gross.	
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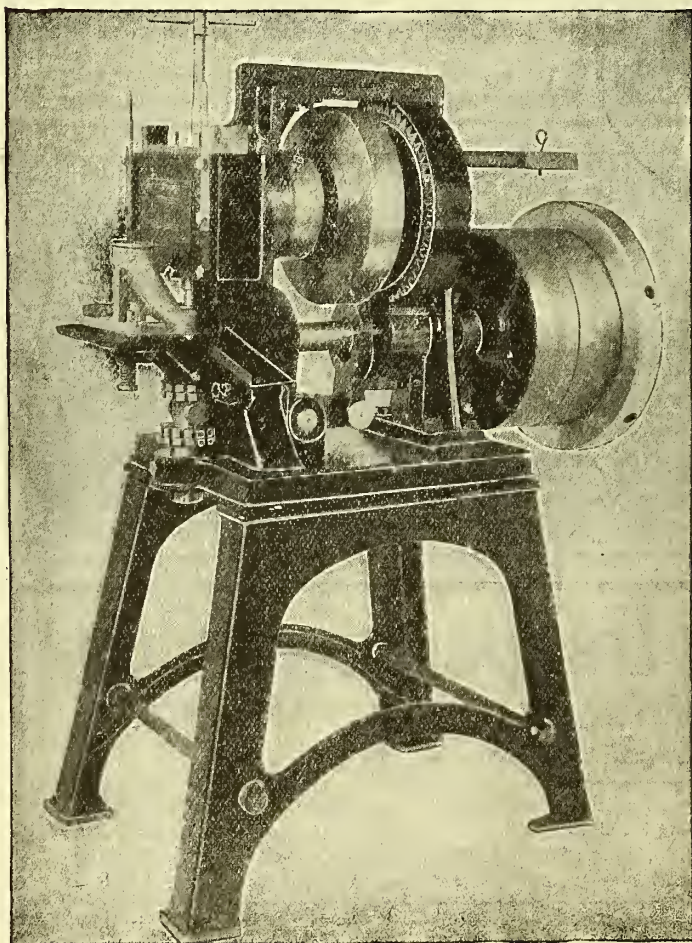
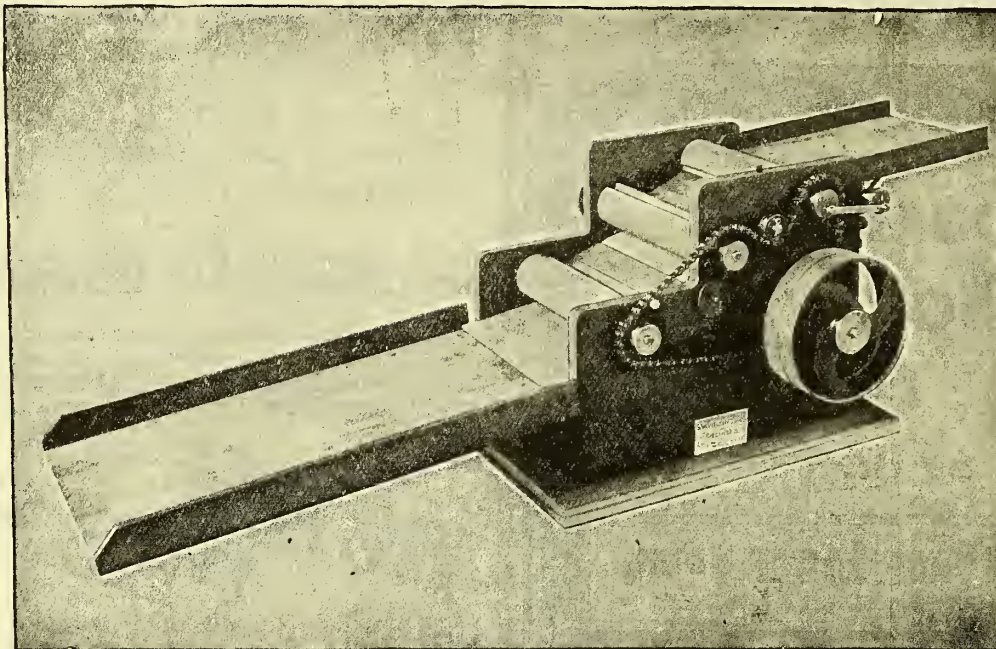
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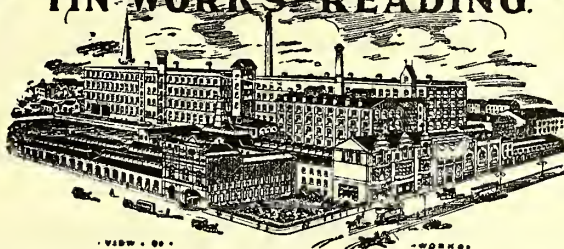
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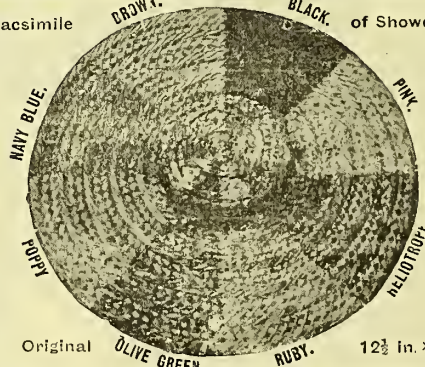
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Summer Issue, 1907. pp. 58, 59.
Diary, 1909, pp. 46, 47.

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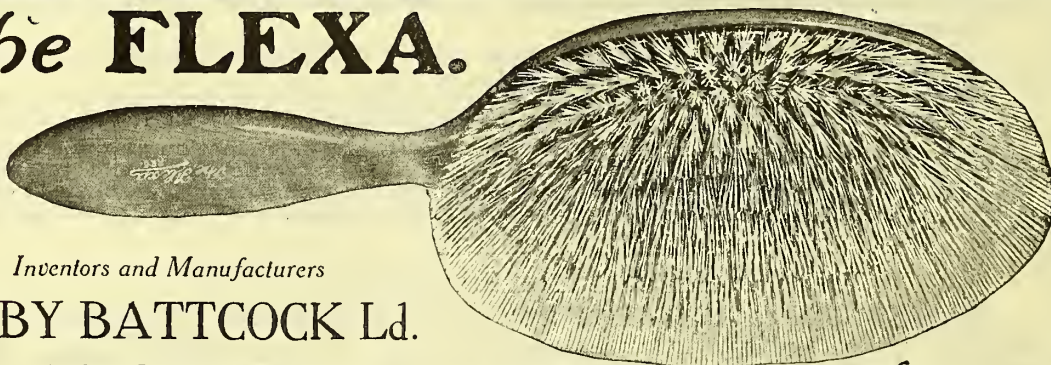


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Spare Valves, 2/- doz. Spare Teats, 1/6 doz.

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Made by special machine devised by ourselves. Perfect Article. Smooth, with ingredients evenly distributed. Samples on application. Please compare; this is all we ask to ensure business resulting.

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We are the largest packers in the country. Write for prices for Tins, Bottles, etc. Also for particulars of new packages.

SHIRLEY BROTHERS, Ltd., WHITECROSS WORKS, LONDON, S.E.
And WITHINGTON, MANCHESTER.

JUDSON'S GOLD PAINT.

6d., 1/-, 1/6, and 3/6 Boxes.



JUDSON'S SPECIALITIES.
READY-MIXED PAINT.
VARNISH STAINS,
ENAMELS,
WAX FLOOR-POLISH,
BLACK LACQUER,
BRUNSWICK BLACK,
STRAW HAT POLISH,
ALUMINIUM PAINT,
DYES,
FURNITURE CREAM,
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ALWAYS GIVE SATISFACTION!
SELL WELL!!
PAY YOU TO SELL!!!

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Macks Road, Bermondsey, S.E.

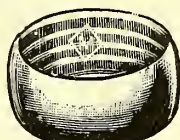
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LUCRATIVE SIDE-LINE FOR CHEMISTS.

May be worn on any finger. Scientifically made from specially prepared Metals of remarkable galvanic and curative properties. Retain their power for any length of time.



No. 1501.
Ordinary width.



No. 1502.
Belcher shape.



No. 1503.
Chased.

	Covered in Rolled Gold.		9-carat Gold, stamped.		15-carat Gold, stamped.		18-carat Gold, stamped.	
	Retail Price.	Trade Price.	Retail Price.	Trade Price.	Retail Price.	Trade Price.	Retail Price.	Trade Price.
No. 1501	4 6	2 6	7 6	4 6	15 0	9 6	21 0	13 6
1502	7 6	4 6	10 6	6 6	18 6	11 0	24 0	15 0
1503	6 0	3 6	9 0	5 6	18 6	11 0	24 0	15 0

The No. 1501, covered in Rolled Gold, is the best selling line. Special trade price per doz., 24s.
A SPECIAL DISCOUNT OF 5 PER CENT. FOR CASH WITH ORDER.

With each dozen rings we supply, gratis, a handsome plush-covered show stand. Also a supply of neat booklets with full descriptive matter. Regulation size measurement cards free.

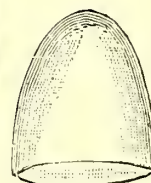
Carriage paid on Orders of £2 and upwards to any town in the United Kingdom.

We are the right House for Catheters, Enemas, Elastic Hosiery, Hot Water Bottles, Injection Syringes, Pessaries, Sponge Bags, Trusses, Water Beds, Water and Air Cushions, Waterproof Sheeting, and every description of India Rubber Sundries.


WRITE FOR ILLUSTRATED CATALOGUE, POST FREE. OUR GOODS ARE RIGHT AND PRICES LOW.

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THE WORLD-WIDE REPUTATION that these Pessaries have obtained since their invention by W. J. Rendell in 1885 has induced unscrupulous persons to place upon the market worthless and injurious compounds, with colourable imitations of W. J. Rendell's labels. To distinguish the genuine Pessaries from these fraudulent concoctions, see that the Registered Trade Mark and Number, in **RED INK**, are upon each box thus:

Registered
Trade Mark, 
without which
none are genuine.
No. 182,688.

W. J. Rendell
No. 182,688

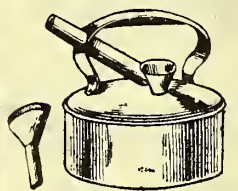
Registered also in Australia, India, The Cape, The Argentine, Germany, &c.

IMPORTANT NOTICE AND CAUTION.

Several injunctions in the High Court of Justice having already been obtained (reports of which have appeared in "THE CHEMIST AND DRUGGIST"), W. J. RENDELL'S SOLICITORS are instructed to take proceedings against all persons (Makers or Vendors) fraudulently using the name of "W. J. RENDELL," "RENDELL," or any colourable imitation thereof in connection with Pessaries NOT manufactured by

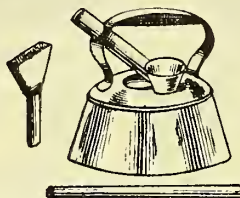
W. J. RENDELL,
INVENTOR AND SOLE MAKER,
15 CHADWELL STREET, CLERKENWELL, LONDON, E.C.

TOOGOOD'S BRONCHITIS KETTLES



246

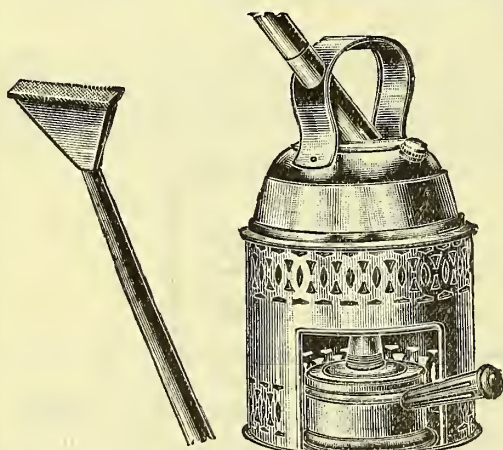
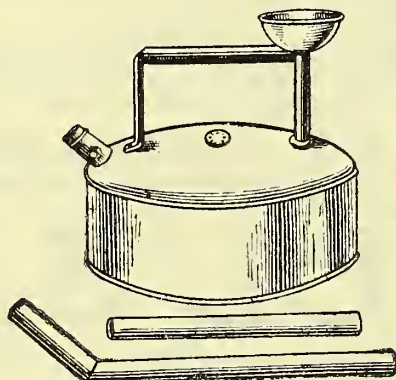
2½ 3½ 5 7 pint
10/6 13/- 16/- 20/- doz.



250

Oval 3 pint 2/6 each
,, 4 ,, 3/- ,,

FIG. 247
Toogood's
Patent
3/3 each

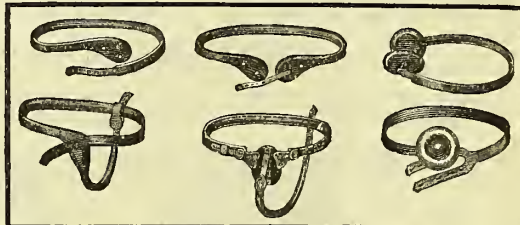


1750

With Stand and Spirit Lamp, 5 pint, 5/3 each.
Subject to usual Terms.

WILLIAM TOOGOOD, LTD.
HEDDON STREET, LONDON, W.

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WHOLESALE.
BEST QUALITY.

ACTUAL MAKERS.
BOTTOM PRICES.

MADE ON THE PREMISES.
Specials Despatched in 24 hours.

Illustrated Price List free

		Double.
Bailey's Circular Trusses	23/-	37/-
" 2nd quality	16/9	31/6
" Special "Marone," with Customer's Name in Gold...	26/-	43/-
Correspondence invited.	Best Shipping Terms.	[1]

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THE NEW 'ADAPTABLE' HOT WATER BOTTLE

(REGISTERED DESIGN.)

Suitable for many purposes for which the old-fashioned shape is useless.

For BED WARMERS.
For CARRIAGES.
For MOTOR CARS.
For INVALIDS, &c.

Customers can have their names, &c., printed on reverse side.

LOW PRICES. BIG DISCOUNT.
Sole Manufacturers:—

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DISPENSING BOTTLES & PHIALS.

I. ISAACS & CO., Glass Bottle Manufacturers,
106 Midland Road, St. Pancras, London, N.W.

Beg to call attention to their REDUCED PRICES FOR THE NEW YEAR. Early orders solicited.

FIRST QUALITY.

3 & 4 6 & 8 12 16 ounce. } Round edges, plain or
9/- 10/- 15/- 20/- per gross } graduated, quinine tinted.

SECOND QUALITY.

3 & 4 6 & 8 12 16 ounce. } Round edges, plain or
7/6 8/6 12/- 18/- per gross } graduated, clear blue tinted.

PANEL BOTTLES (reduced prices).

2 3 4 6 8 ounce
7/6 8/- 8/- 9/- 10/- per gross.
WHITE PHIALS—GOOD QUALITY.
3/6 4/- 4/6 5/6 per gross } Plain or teaspoons.

Six gross and upwards, assorted or otherwise, sent carriage paid to any address in the United Kingdom. Smaller quantities not carriage paid.

Established 50 years. Bankers: London and Westminster Bank.

DUNLOP HOT WATER BOTTLES



Special Terms to the Trade.



Catalogue & Prices on Application.

possess real advantages over any other make. They are thoroughly made and properly tested before leaving the works. By a simple arrangement of the stopper every particle of water poured into the neck is bound to go inside, leaving no residue to run out and cause discomfort.

DUNLOP RUBBER CO., Ltd.,
Manor Mills, ASTON, BIRMINGHAM.

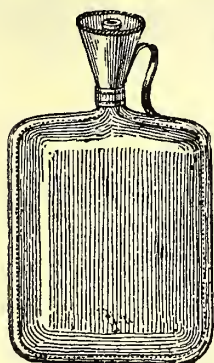
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HOT WATER BOTTLES



WHITE RUBBER.

Inches.	Patent Safety Stoppers.	Ordinary Stoppers.
10x6	3/6 each	3/- each.
10x8	3/9 "	3/6 "
12x8	4/3 "	3/9 "
12x10	5/- "	4/4 "
13x9	5/- "	4/4 "
14x8	5/- "	4/4 "
14x10	5/3 "	4/9 "

LOTS OF HALF-DOZEN SUPPLIED BY WEIGHT.

Patent Stopper ... @ 4/6 lb.
Ordinary Stopper... @ 4/3 lb.

When this quantity is taken, repeat orders will be charged at same price.

RED RUBBER

Finest quality.

Inches.	
10x8	3/9 each.
12x8	4/3 "
12x10	5/- "
13x9	5/- "
14x10	5/3 "

Fully guaranteed.

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Allcock's Porous Plasters

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The Three Reliables

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"A Perfect Beverage, combining Strength, Purity and Solubility."
—"MEDICAL ANNUAL."

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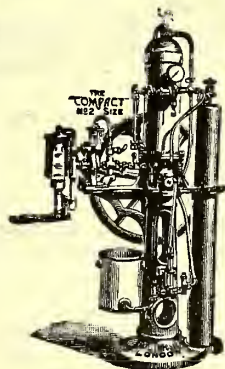
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are specially designed for
CHEMISTS, GROCERS, RESTAURATEURS,
and everyone to whom space is an object,
and can be used for filling Syphons, Codd's
Bottles, or Cork Bottles.

OCCUPY LITTLE SPACE!
ARE READY FOR USE IMMEDIATELY!
REQUIRE NO FIXING!

Produce Soda Water, Lemonade, &c., of the
highest class and greatest purity.

Write for Catalogue.



A COMPLETE APPARATUS—
CAPABLE OF PRODUCING OVER
300 DOZEN LARGE BOTTLES
OF AERATED WATER PER DAY
—from £20.

Bottles, Boxes, Essences, and all
Requisites for the Trade at
Lowest Prices.

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Proprietors of Galloway, Bros., Bolton.



AERATED WATER BOTTLING (JACKSON'S) PATENT.

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reduced one half.

Vastly improved quality.
No waste in filling.
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No skill required.

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EFFERVESCENT SALINE LAXATIVE.
URIC ACID SOLVENT.

A combination of the Tonic, Alterative and
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Waters of Europe, fortified by the addition of
Lithia and Sodium Phosphate. It stimulates
the liver, tones intestinal glands, purifies ali-
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Rheumatism, Gout, Bilious Attacks and Constipation.
Most efficient in eliminating toxic products
from intestinal tract or blood, and correcting
vicious or impaired functions.

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Cures Colic or Gripes in Horses or Cattle, Scour and Weakness in all Young Stock, Blown Cattle and Sheep, Debility, Chills, and Low Condition in all Stock.

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Almost infallible for Tape Worms in Lambs and other Animals; for Husk or Hoose in Calves, Lambs, &c. A speciality for Worms in Horses and Colts.

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For Costiveness, Loss of Oud, Indigestion, Garget, Colds, Fever, Hidebound, &c., in Cattle. Prepares Cows for calving. Prevents Milk Fever, and cures Bad Cleansing.

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The Ewe Drench for Ewes, 3/6 per doz.

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(THE PURIFIED DRIFFIELD OILS)

Heal all Wounds in Horses, Cattle, and Sheep, Sore Teats and Swollen Udders in Cows and Ewes. For Anointing in difficult Lambing or Calving.

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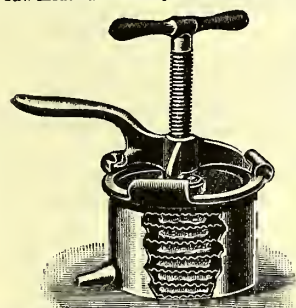
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The only firm who supply "Chemists only."

The "Hercules" Patent Meat Juice Press

More economical and hygienic than others. Nearly the whole of the juice in raw meat—about 50%—can be obtained cold, i.e., about double the quantity obtainable by any other press. Only half the quantity of meat, therefore, being necessary, the saving is very considerable. No pressing cloth being used and all parts in contact with the meat being of pure tin or nickel-plated, these Presses are unsurpassed from a hygienic point of view. To be obtained from all Chemists. (Wholesale: S. Maw, Son & Sons, Ltd., Aldersgate St., Allen & Hambury, Ltd., 48 Wigmore St., W.; R. J. Reuter, 5-7 Denman St., London, W.; and Barclay & Sons, Ltd., 95 Farringdon St., London, E.C.) Also from Messrs. J. Barker & Co., Ltd., Kensington; Benettink & Co., Ltd., Cheapside; Farrow & Jackson, 8 Haymarket; Harrod's, Ltd., Brompton; G. Kent, 199-201, High Holborn; J. Shoolbred & Co., Tottenham Court Road; Wm. Whiteley, Ltd., Westbourne Grove; Army & Navy, and Civil Service Stores; Spiers & Pond, &c.



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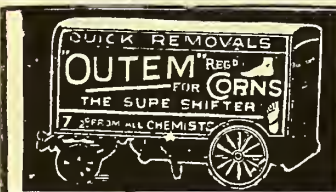
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KRUSCHEN SALTS,

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Fig. 386



Fig. 390



Fig. 990

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This new form of presenting the Virus offers a great convenience to the public. The non-poisonous and other well-known distinctive properties of the "LIVERPOOL" VIRUS are unchanged and the price unaltered.

	RETAIL	WHOLESALE	
VIRUS FOR MICE ...	1/6	1/-	9/- per doz. for ½ doz. and upwards.
VIRUS FOR RATS ...	2/6	1/8	15/- " " "

In tins ready prepared with the bait, or on jelly in glass tubes as heretofore.

VIRUS FOR RATS ...	8/-	5/-	45/- per doz. for ½ doz. and upwards.
In tubes only (equals six 2/6 packages).			

PREPARED IN ENGLAND BY ENGLISH SCIENTISTS.

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EVANS SONS LESCHER & WEBB, Limited,
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For the Cure of all Skin Diseases and
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"EQUISAN"

(NON-POISONOUS.)

Is most successfully used for producing
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From Miss MURRAY, 58 Pulteney Street, Bath, July 28th, 1907.
Kindly send me one gallon of "EQUISAN." I am using it daily on some Black Pups, and find it is improving the hair and removing all spots and scurf from the skin. I used it some time ago for Mange and it proved a perfect cure. I shall always recommend "Equisan" as a thoroughly efficacious skin dressing, and it is such an advantage being non-poisonous and moderate in price.

From E. WELLS & SON, Carmen and Stable Keepers,
6 Bush Road, Rotherhithe, S.E.

We have derived great satisfaction from the use of your specific "EQUISAN" on our horses. It has proved a cheap and effectual dressing for Mange, and all Skin Diseases, Collar Galls, &c., it has proved a certain cure.

We consider its non-poisonous nature a great addition to its value.

Shall be pleased to recommend it, and consider no stable should be without it.

From Mrs. BAKER, Loose, Battle, Sept. 17, 1908.
I find it splendid for King Charles and Pekingese, nothing I have used before doing so much good.

	Half-pint.	Pint.	Quart.	Half-gall.	Gallon.
Prices ...	9d.	1/-	2/-	3/-	5/-
Postage extra	4d.	6d.	10d.		

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STIPENDUM CORK STOPPERS

in all sizes suitable for
KALIS, CITRATES, DISPENSING, and all FLUIDS.

STIPENDUM COVERED POTS

THE BEST FOR FACE AND TOOTH POWDERS, PASTES, AND OINTMENTS. GREASE PROOF.

For Samples and particulars apply to
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WHOLESALE PRICES OF PHOSFERINE.**CASH WITH ORDER.**

1/1½ size Phosferine	...	10/2½ per dozen net
2/9 " " "	...	25/6 " " "
4/6 " " "	...	40/9½ " " "

5 GROSS LOTS (assorted sizes if required) subject to 1½ per cent. Cash Discount.

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The selling price of Phosferine is Protected, it must not be retailed in the United Kingdom under the following prices, viz.:—1/1½ size for 1/-, the 2/9 size for 2/6, 4/6 size for 4/-.

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It is one of the largest advertised medicines in the kingdom, and sells freely.

It can be recommended with the greatest confidence for all Nerve Pains, Nervous Disorders, Rheumatism, Nervous Headache, Dyspepsia, General Debility, &c.

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A recommendation that can be claimed for no other Proprietary Medicine.

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CAUTION.

To Imitators or Dealers in Imitations of

PHOSFERINE.

PERPETUAL INJUNCTION

WITH

DAMAGES AND COSTS,

obtained against Frederick John Fowles for using the word

PHOSFEROQUIN.

In the High Court of Justice.

CHANCERY DIVISION.

Before MR. JUSTICE COZENS-HARDY.

Between ASHTON & PARSONS, LIMITED,

Proprietors of "Phosferine" (Plaintiffs)

AND

FREDERICK JOHN FOWLES (Defendant).

A PERPETUAL INJUNCTION with damages and costs was granted on the 14th December, 1900, restraining the above-named Defendant, his servants and agents from in any manner infringing the Plaintiffs' Registered Trade Mark, 6,630, and from selling or offering or exposing or advertising for sale or procuring to be sold any medicinal preparation not prepared by the Plaintiffs under the name of "Phosferine" or under any other name which by colourable imitation of the Plaintiffs' word "Phosferine" or otherwise was calculated to represent or lead to the belief that such preparation is "Phosferine" or is a preparation of the Plaintiffs, and from selling or supplying any such preparation as aforesaid in response to orders for "Phosferine" or for a preparation of the Plaintiffs or from otherwise passing off or enabling or assisting others to pass off any such preparation as aforesaid as or for "Phosferine" or a preparation of the Plaintiffs.

All information relating to the infringement or dealers in infringements of "Phosferine" will be confidentially treated, and should be addressed to the proprietors of "Phosferine."

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LUDGATE HILL,

Or to Messrs. J. E. EVANS-JACKSON & CO.,
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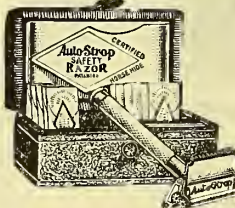
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THE PERFECTED SAFETY RAZOR

It will give you the smoothest and most comfortable shave, and what is more important, *it will continue to do so.* It has a patented self-contained automatic-stropping arrangement, which enables you to have a perfectly sharpened blade each and every time you wish it. *Let us send you an AutoStrop Safety Razor on approval.* By using it personally you can become confident that every claim that you and we make for the AutoStrop Safety Razor is genuine, and that it is an article which will completely satisfy the most critical customer.

Don't sell a DULL razor when you can get a SHARP one.

The AutoStrop Safety Razor is particularly well suited to form part of a Chemist's stock. It is quadruple silver-plated and the blades are of the finest lancet-steel. It is packed in a neat leather covered case, daintily lined with velvet. It looks well in your show cases or windows. The retail price is One Guinea net.



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21/- each

WHOLESALE.

3 doz. lots, 14/- each;
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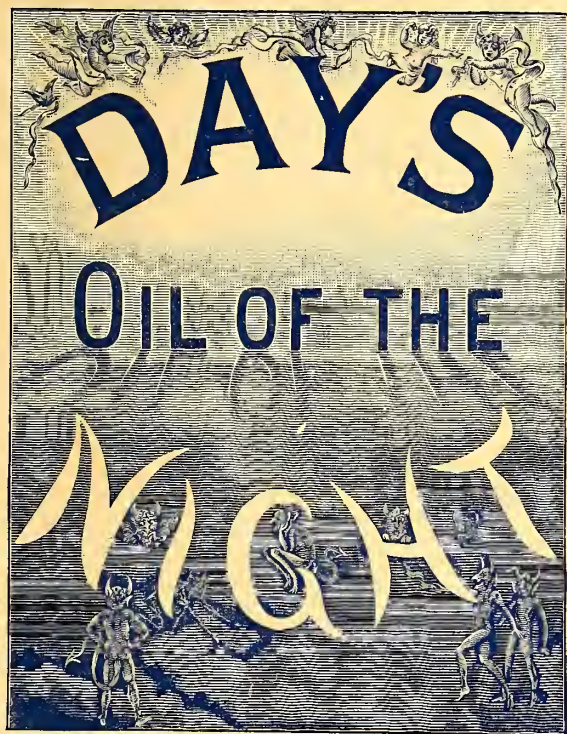
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